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An exploration of issues relating to the implementation of Active Learning in Saudi Arabian Universities

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UNIVERSITY OF
PLYMOUTH

**An exploration of issues relating to the
implementation of Active Learning in Saudi
Arabian Universities**

By

FATMAH ALOTAIBI

A thesis submitted to Plymouth University
in partial fulfilment for the degree of

DOCTOR OF PHILOSOPHY

Faculty of Arts & Humanities

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Acknowledgements

*In the Name of Allah, the Most Beneficent, the Most Merciful
“Praise be to Allah, to Whom belong all things in the heavens and on earth: to
Him be Praise in the Hereafter: and He is Full of Wisdom, acquainted with all
things” (36:1, Holy Quran).*

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Author's Declaration

At no time during the registration for the degree of Doctor of Philosophy has the author been registered for any other University award without prior agreement of the Graduate Sub-Committee. Work submitted for this research degree at the Plymouth University has not formed part of any other degree either at Plymouth University or at another establishment.

Relevant scientific seminars and conferences were regularly attended at which work was often presented; external institutions were visited for consultation purposes and two paper prepared for publication.

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Abstract

Saudi Arabia's Vision 2030 is ambitious in its proposals for educational reform which includes the preparation of a modern curriculum focused on rigorous standards which will be aligned with a range of education outcomes. Therefore, Saudi Higher Education laid the groundwork to develop and improve the educational aspects towards students and lecturers, as well as to adopt all new approaches in education. Accordingly, this study aimed to explore the perceptions of Saudi lecturers and undergraduate students towards learning approaches especially Active Learning (AL) when participating in active courses.

The advantage of AL is that it may provide the Colleges and Universities with a mechanism by which improvements in educational outcomes are achieved. As the move to an AL model represents an essential shift in the Saudi education system, this study illustrates how Saudi students and lecturers reacted to this alteration and how it influenced the quality of their learning and teaching experience.

The objective of the study is to classify Saudi undergraduate students and lecturers' perceptions of the advantages, challenges and future of AL. Therefore, the vital factors that affect the lecturers' and students' views are discussed, and recommendations for future research, strategy and practice are provided. Qualitative methods were used to gain rich descriptive data to facilitate the exploration of the phenomena. Three qualitative approaches were used to gather the data: observations, focus group discussions, and in-depth interviews. The three different techniques made it possible to gather diverse forms of information.

Three universities were selected to be investigated in this study: Umm Al-Qura University, King Saud University and Princess Nora bint Abdulrahman University. Using an interpretative approach, the data was analysed in the form of explanation and interpretation of the participants' perceptions of active learning.

The findings of this study indicate that there were many factors that impacted (both positively and/or negatively) on the process of using AL in Saudi Universities. The main factors identified by this investigation were leadership, national culture, training, and technology, and these influenced the adoption of AL both directly and/or indirectly. The results of this study reveal a distinct pattern in the adoption and use of AL in the participating universities, although the processes of implementation varied between them. A particular emphasis of this project was that AL offered heightened learning experiences and improved students' understanding of their courses. The results of the data analysis, also, show that AL has not yet been fully or adequately implemented in Saudi universities, and so far, it has not received official endorsement as educational policies at other levels of the educational system.

As there are always challenges of adaptation when a new method is employed, this research offers vision into how the challenges of implementing AL in Saudi Higher Education could be addressed. An AL model is introduced to offer the factors that affect the implementation of active learning.

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Acronyms

AL	Active Learning
KSU	King Saud University
UQU	Umm Al Qura University
PNU	Princess Nora bint Abdulrahman University
MHE	Ministry of Higher Education
NTP	National Transformation Programme
NCAAA	National Commission for Academic Accreditation and Assessment

Chapter 1: Introduction of thesis

1.1 Introduction

With the unprecedented advance of science and education, the expansion of knowledge and the rapid development of modern technologies, it has become imperative to develop a method of learning that encourages students to take responsibility for these changes and provide the requisite skills such advances demand of the next generation. The Twenty-first Century approach to erudition would focus on the principle of learning by doing, encouraging greater depths of understanding and application of the educational material offered (Saadeh *et al.*, 2006). This is a vision that could be materialised through Active Learning (AL) a method of education that places the responsibility for learning on the learners themselves (Gibran, 2002). The intention is to create a positive impact on learners' attitudes towards themselves and towards their peers, to increase their interest levels and attention spans, to stimulate greater preoccupation and interaction with the activities they face, and to strengthen the trust between the lecturer and his/her students, wherein students receive encouragement and support and are given the opportunity to choose the work themselves, reflect on their practices and their thinking processes, tap into their creative thought and innovative solutions to problems and freely express their own ideas (Shaheen, 2006).

In spite of criticism, traditional methods are still in wide use in Saudi Arabia, as studies by both Zaidi (2008) and Al-Otaibi (2013) have highlighted. Hence the Ministry of Education in the Kingdom of Saudi Arabia has sought to provide a pedagogical system capable of cognitively contributing to the support of effective knowledge and developing Saudi learners who are able to face up to scientific challenges with sufficient prowess to compete with other leading countries (MOE, 2010). Whether in the context of the chosen curriculum or the elements of the educational process (teacher, learner, and the learning environment), if it is to become effective, this new-look learning process should employ AL strategies - cooperative learning and problem solving, to name but a few (Zahrani, 2012).

1.2 Learning and Active Learning approach

Social activity is said to be an effective way through which learning can be achieved because it is closely related to a connection with other human beings, teachers, peers and family (Bauman *et al.*, 2005). Teaching focuses on learning, achieving a particular purpose through instructional strategies (Hein, 1991); these strategies are effective only when they impact positively on students' learning (Darling-Hammond *et al.*, 2000). To accomplish effective teaching, it is critical to have a basic grounding in the relevant theories of learning, as these have contributed tremendously to our current understanding of human thought and behaviour. Teachers who know these theories appear will be more effective and aware in their work (Zoller & Harrison, 2007).

The last few decades of the Twentieth Century witnessed a significant shift in studies related to learning and education. Psychologists and educationalists focused on the principles of behavioural theory in their interpretation of the processes of learning and education. At the beginning of the 1970s they focused on the principles of cognitive theories (Asha *et al.*, 2012). In the 1980's constructivism exerted a widespread influence (Major & Mangope, 2012). This change in the interpretation of the learning process changed the concept of the process itself along with the instructor and the learner. Constructivism is a theory that holds that the acquisition of knowledge is an active rather than a passive process (Capricorn, 2012). Constructivists advocate a student-centred learning approach which focuses on student involvement in the learning process: the lecturer poses a question and the learners then work together in small groups to discover one or more solutions (Major & Mangope, 2012). Alzaghouli (2012) pointed out that students thus build their own knowledge through activities that engage them in active learning. Therefore, effective learning occurs when students take stock of what they already know and then move beyond it. According to Weegar & Pacis (2012), constructivism is the prevailing theory active in all education today. An understanding of constructivist teaching and learning and the theory that supports it can help teachers to protect those aspects of classroom life not immediately influenced by national testing. Constructivism is being supported in several ways such as laboratory research and in school practice. It is incumbent on educators, researchers, and theorists to adopt its constructs and put them into practice in all parts of the field of education (Blake & Pope, 2008).

One view of learning is that it is an evolving, cognitive process in which students acquire knowledge by themselves rather than by receiving knowledge directly from the educator (Piaget, 1972). Piaget further acknowledged that students build up knowledge based on their experiences, and how they do so is linked to their physical, biological, and mental phases of development (Darling Hammond, 2000). From the Piagetian viewpoint, children learn more effectively from hands-on activities than from passive observations. Learners need to be free to discover, manipulate, touch and experiment with different resources on their own (Piaget, 1952).

Today's learners differ from their predecessors insofar as they are oriented more towards technology and inhabit an educational environment that depends on dealing rapidly with hardware and on appropriate tools for AL (Al-Otaibi, 2013). This leads us to the need to provide new technology tools that could promote interaction in active learning, for instance wikis, Facebook, blogs and Nings to reinforce social activity and stimulate new students (Stacey & Gerbic, 2008). Active participation strengthens learning, regardless of the learning environment (Anderson & McCarthy, 2000). It also requires mental effort from learners, changes attitudes and provides the means, capabilities and tools for the practical application of what has been learned.

Educationalists define AL in different ways. Despite variations in the description, there are a semi- consensus of its importance (Bilawi & Abu Jelban, 2007). The

appropriate approach capable of universally dealing with knowledge and information that are difficult to assimilate is active learning. Such an approach provides the basis and rules for dealing with that knowledge and information and promotes the proper selection and application of effective information (Al-Ghamdi, 2011).

AL is learning which makes use of diverse educational activities and provides the learner with a high degree of freedom, privacy and control. The learning experience is open-ended and not strictly predefined as with traditional knowledge, so that the learner is able to participate actively and effectively and can configure appropriate experiences (Asar, 2002). According to Saadeh *et al.*, (2011) AL is a method of learning and teaching at one and the same time. Learners participate in activities, exercises and projects in a learning environment that is rich in variety and which will allow them to listen positively and engage in constructive dialogue, discussion, conscious thinking, competent analysis and deep meditation about everything they read or write. The study of material, or things, or issues, or opinions is a mutual experience with a lecturer who encourages them to take responsibility for their own education and guides them towards the achievement of learning objectives (Kariman, 2012). As described by Ahmad (2013), AL is one that makes the learner participate effectively in the educational situation by such means as research, reading and writing reports under the supervision and guidance of the teacher. As defined by Bonwell & Eison (1991), AL provides an opportunity for learners to participate in activities that encourage them to think about and comment on the

information presented for discussion. Instead of merely listening they develop the skills to deal with various concepts and multiple fields of knowledge.

Recent research has found (Khalil *et al.*, 2014; Gibran, 2005; and Saadeh *et al.*, 2011) that the objectives of AL involve all of the following:

- encouraging learners to acquire multi-thinking skills and to read critically
- a diversity of appropriate educational activities for learners in achieving the desired educational goals
- support of the self-confidence of learners in relation to various fields of knowledge
- helping learners to discover important issues
- encouraging learners to ask a broad range of questions and to solve problems
- determining how learners learn different subjects
- measuring the ability of learners to build new ideas and organise them
- enabling learners to acquire the skills of cooperation and interaction and communication with others
- acquisition of desirable knowledge, skills and attitudes
- on the teacher's side, an ability to increase knowledge, understanding, retention of information and the development of self-motivation in the learner

Followers of literature on AL tend to find that writers have evolved many strategies in this field and that teachers need to be trained in the application of these strategies if they are to produce results without confusing and boring their students. This study will address two specific AL strategies: cooperative learning and problem-solving.

Firstly, cooperative learning requires learners to work with each other, sharing pertinent dialogue among themselves during curriculum-related activities, to teach each other and effectively develop their personal and social skills positively throughout this interaction period (Kojak, 2008). Al-Sharif (2000) identified that learners learn together through being in small groups in order to achieve a specific objective - the accomplishment of a particular scholastic task - with each learner being an active partner, responsible for the success or failure of the group. Such learners work in groups or in pairs to achieve learning objectives (as defined by Obaidat *et al.*, 2007).

Secondly, problem solving involves methods in which previously acquired information and skills are utilized to meet the requirements of new situations; former lessons are reorganised and applied to the new scenarios the individual faces (Abdul Hamid *et al.*, 2005). As well as the methods of solving problems there is a sharp focus on teaching. One of the ways of helping students to find solutions to the problems they encounter is to encourage research, questioning and experimentation (Huwaidi, 2006). Solving problems also requires the ability to

analyse and synthesise the elements of the situation confronting the individual (Abu Zina, 2003). The solution to the problem depends on the method or the manner in which the individual deals with different situations using the information he/she has, together with his/her former skills. Vygotsky saw learning as a collaborative process demonstrated by the theory of the zone of proximal development (ZPD). He defined this zone as “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (Vygotsky, 1978: p.86). Moreover, he stated that social learning theories help to provide an explanation of how people learn in social contexts and show how individuals construct AL communities (Freeman, 2010). Vygotsky (1962) first indicated that we learn during our interactions and communications with others by testing how our social environments impact on the learning process. He proposed that learning takes place during the interactions which students have with their peers, teachers and other specialists. Accordingly, teachers can make a learning environment that exploits the learner's capacity to interact with others in the course of discussion, feedback and collaboration.

In this study I focus specifically on introducing AL in Saudi Arabia and factors that may have an impact on its implementation. There are numerous obstacles when it comes to using AL in practice in the Saudi context. Gibran (2005) and Saadeh (2011) isolated the obstacles that AL strategies face in Saudi context, specifically:

- Resistance to change

Shifting the learner from the traditional passive style of learning to an active one, and altering the role of the lecturer from a metaphorical teleprompter to the role of a facilitator of learning may meet with considerable resistance. This stems primarily from the heavy proliferation of traditional education, the anxiety and discomfort caused by such a change and the absence or lack of incentives for educational reform.

- The obstacles associated with the application of active learning

Lack of time devoted to planning, preparation and application, the difficulties of application in a classroom of large numbers, the lack of materials, resources and help are all factors that serve to hinder the application of AL in the classroom.

- The obstacles linked to the lecturer

Assaf (2003) theorised that teachers become used to the traditional methods and form an unwillingness to change. They may lack the necessary skills to teach in the framework of active learning, or fear losing control over the classroom. They may also be worried about criticism from the school principal or parents regarding unorthodox methods, or about their failure to cover the curriculum; they may believe that the traditional teaching approach gives better results.

- The obstacles linked to the learner

Al-Otaibi (2013) indicated that encouraging learners towards an AL approach often clashed with their habituation and comfort with traditional learning methods, their unwillingness to change and participate, their poor self-confidence and their lack of experience in AL methods. Time restrictions in meeting scholastic quotas, fear of non-participation on the part of other students, shortfalls in the utilisation of higher-order thinking skills and teachers' fears of losing control of their students could also be added to this list.

- Leadership

The phenomenon of leadership has been extensively researched because it is believed that it plays a most important role in the success of countries, organisations and communities (Alomiri, 2015). It is considered to be the main and crucial factor in influencing group processes and outcomes. The importance of leadership style has long been a subject of much debate and contentious discussion. The word "leadership" has numerous definitions, depending on the perspective of the educator (Stogdill, 1974). In the past 20 years alone, a multitude of publications has been presented for study on the subject of leadership. Although most studies of leadership have taken place in business organisations, the military and government agencies, recently more attention has been given to higher education (Vroom & Jago, 2007). Therefore, in this study leadership styles will be investigated as a crucial factor in supporting learning processes at university level.

To accommodate the demands of Saudi citizens to attend higher education institutions the number of Saudi universities has increased over the last ten years, from seven public universities to twenty-eight. As a result, policy-makers have increased efforts to make higher education as accessible as possible to almost all Saudi students. Additionally, the quality of higher education has always been a concern (Al-arfaj, 2010).

All current education reform efforts in Saudi Arabia aim to improve teaching and learning but there are huge differences in how the state goes about it. Some reforms attempt to influence the overall approach to teaching and learning within a university. Still others hope to change lecturers' practices one lecturer at a time.

Leadership in every university has a critical role to play in the success of the institution. It should have high-level thinking, planning, communication, interpersonal, decision-making and problem-solving skills. Smith & Abouammoh, (2013), have suggested that leadership in universities must be innovative and open to new ideas and perspectives, and they must have the ability to motivate and enthuse staff and students. In Saudi universities, according to Al-Suwailem & Elliott (2013), there are many excellent leaders but there are also many who lack the necessary leadership skills and ability to take Saudi higher education to the high-quality and productive future envisaged by the government.

Schools and universities need more competent leaders (Leithwood *et al.*, 2006). Leadership provides a critical bridge between most educational reform initiatives, and having those reforms makes a genuine difference for all students. Therefore, changing a style of education from a traditional style to an AL style requires considerable support from the top and middle leadership within a university. Hence, this study considers that specific leadership styles can contribute hugely to AL adoption in Saudi universities. These styles have already been extensively researched, particularly the so-called 'transformational', 'transactional' and 'laissez-faire' leadership styles. Most of the research has focused on leader behaviour (Yammarino & Dansereau, 2009; Yukl, 2010; Avolio, 2011) and how it affects follower commitment, motivation, satisfaction, innovation, creativity and performance (Howell & Avolio, 1993; Zagoršek *et al.*, 2009; Emery & Barker, 2007; Riaz & Haider, 2010; Yukl, 2010).

Many studies show that transformational and, in some cases, transactional leadership, increase commitment (Pitman, 1993), motivation (Masi, 1994) and the loyalty of followers (Kelloway and Barling, 1993), project quality and innovation (Keller, 1992), sales performance (Garcia, 1995), organisational commitment and job satisfaction (Walumbwa *et al.*, 2004), effectiveness (Lowe *et al.*, 1996), job success and career satisfaction (Riaz & Haider, 2010). Pieterse & Knippenberg (2010) have shown that these two leadership styles are positively related to innovative behaviour. This means, however, that innovation and leadership are closely related. Leadership always has some focus on bringing about a better

future. In this sense, leaders are necessarily innovators. They do not accept the status quo and always invite new approaches to enhance the organisational outcomes. Consequently, leadership might also be one of the most important factors in implementing positive innovations in the field of education.

Levine (2000) studied presidential leadership style in fifty national universities in America and found that transformational leadership is the most satisfactory. Many meta-analysis studies have been conducted on transactional-versus-transformational leadership. For example, Lowe *et al.* (1996) examined the results of a meta-analysis of the general relationship of the two styles in order to measure leadership effectiveness and prevalent leaders' behaviours (for example, 'What do leaders do?' and 'How does what leaders do relate to performance?') They concluded that there was a stronger relationship between transformational scales and effectiveness than between transactional scales and effectiveness. Consequently, this study will consider the latter leadership style as a crucial element in contributing to improved teaching and learning strategies, particularly with an emphasis on AL at Saudi universities.

- Saudi National Culture

The concept of culture became increasingly significant in education during the last decade of the last century. This enhanced interest may be understood as an example of dissatisfaction with the limitations of those leadership and management models which stress the structural and technical aspects of schools and colleges.

The focus on the intangible world of values and attitudes is a useful counter to these bureaucratic assumptions and helps to produce a more balanced portrait of educational institutions.

Culture relates to the informal aspects of organisations rather than their official elements (Schein, 2010). They focus on the values, beliefs and norms of individuals in the organisation and how these individual perceptions coalesce into shared meanings. Culture is manifested by symbols and rituals rather than through the formal structure of the organisation (Hofstede *et al.*, 2010).

Culture is the soul of the nation; the very foundation of nation-building and political progress and growth suggesting that each society has its own characteristic culture and ensuing advantages. Kingdom of Saudi Arabia (KSA) is considered to be the homeland of Islam and has a long, recorded history stretching back over many thousands of years. Arabian and Islamic traditions are nurtured by Saudis with immense pride and satisfaction. Saudi Arabian culture is embedded in its language, its Islamic roots, its humanitarian goals (Abu Nadi, 2012). These are based on intellectual and spiritual traditions, primarily Islam, the Arabic Language, its literature, its history and heritage. Time-honoured nomadic traditions and Saudi Arabia's position as a centre of trade have moulded the very core of its cultural heritage (Al-Farsy, 2003). Islam therefore plays an essential role in determining the country's culture and is a fundamental boost to the organisation of social norms, protocols, values and beliefs that have been taught from an early age in the family

and in school (AL-Shehry, 2008). In Islam Saudis believe that their religion is not just a channel for the worship of God, they believe that it is a broad and comprehensive system that controls behaviour and embraces guidance for their entire life (Al-Bishr, 2008). Furthermore, the social structure in Saudi society is tribal, where the family and tribe are the defining elements. Kinship and affiliation play important roles in all social relations.

This sense of belonging has a deep impact on the lives of individuals. Tribal loyalties are close and the behaviour of individuals within a tribe can jeopardise the reputation of the whole tribe. That said, there is still some latitude for individual taste and choice. The promotion of lasting, trust-based personal relationships is a top priority for the majority of Saudis as it is deeply rooted in the teachings of the Islamic religion (Dahlan & Klieb, 2011).

From 1967 to 1973, Geert Hofstede studied national culture in 66 countries, including: Egypt, Iraq, Kuwait, Lebanon, Libya and Saudi Arabia. In his study, Hofstede interviewed IBM employees and utilized data from 116,000 respondents from these countries. An analysis of these data provides a valuable insight into the national culture of the 1980s. Hofstede's model consists of four dimensions (later five dimensions) of national culture. The first is 'power distance' which is defined as "the extent to which the less powerful members in society, organisations and institutions defer to those they perceive to be in authority over them" (Hofstede, 1991: 28). Saudi Arabia is almost identical to other Arabic and Islamic countries in

this respect. It scores highly (95) which means that inequality is a dominant feature of Saudi society. It is believed that power distance is inculcated from an early age; a country with a high-power distance score like Saudi Arabia therefore places emphasis on obedience and deference towards parents and those of a higher status and demands respect from the younger Saudi generation. This dimension, however, might be a good tool for the introduction of a new style of learning such as AL or e-learning.

The second dimension in Hofstede's model is uncertainty avoidance: the main factors in this dimension are 'uncertainty and ambiguity'. It describes the degree to "which people in a society feel uncomfortable with uncertainty and ambiguity, preferring to deal with structured situations over unstructured ones" (Hofstede, 1991: 113). Uncertainty avoidance, however, is the second highest Hofstede dimension, measuring 80. This means that Saudis are worried about their future and, therefore, they prefer to avoid ambiguity or lack of clarity. Cultures scoring high in this dimension are active, aggressive, emotional and security seeking. Innovation and creativity in these cultures may be restricted (Alomiri, 2015), which may in turn affect the attitude of people within societies or organisations. Such cultures are characterised by a resistance to change. Therefore, introducing a new style of learning such as AL is compromised by a high uncertainty avoidance score in respect to the Saudi culture.

The third dimension in Hofstede's model is Individualism versus Collectivism: this dimension describes the relationship between individuals and groups within a society. It represents the 'extent to which individuals are integrated into groups' (Hofstede, 1991: 51). Saudi society is characterised as a tribal society through its commitment to the group, the family and the tribe. In Hofstede's study, Saudi culture achieved the lowest scores in this dimension, measuring 25. This score, however, is below the global average (64).

The fourth dimension is Masculinity versus Femininity which is defined by Hofstede (1991: 82) as "the degree to which persons see themselves as masculine or feminine" (given what it means to be a man or woman in a society) and the roles assigned to men and to women. In Hofstede's study, the masculinity dimension for KSA is ranked 52, which places the Saudi population above the international average. This dimension might also be seen as ample justification for introducing AL into Saudi universities since, according to this study, Saudi society is characterised as having determination, competitiveness and a bent for material gain, indicating that Saudis are indeed achievement, performance and success orientated.

1.3 Significance of the Research

This study is a contribution to the planned learning strategy in Saudi Arabia as it is the first study to explore the perceptions of female and male lecturers and undergraduate students towards active learning, their views of the future of AL and

critical factors that influence their opinions. Basically, new didactic skills should not be implemented without completely understanding their effect on the learning process. A thorough examination of the issues that promote or challenge the lecturers' experience as well as student stimulus and engagement will guarantee a more efficient transition. The study contributes to the knowledge of AL theoretically and practically. A theoretical framework derived from the study provides guidance for the application of active learning. In practice, the study puts forward recommendations for addressing the challenges of active learning.

The application of AL in Saudi Higher Education is in its very early stages. AL is being applied to deal with one of the main challenges faced in Saudi higher education, which is to provide university education to the rapidly increasing student population in the country. With the limited ability of universities, the Ministry of Higher Education recognised the need to adopt AL to tackle this problem. Several effective and efficient projects in particular are considered to facilitate this strategy. Although Western and Asian countries have delivered active instruction successfully in higher education (Cox, 2009; Prince, 2004; Monks *et al.*, 2006; Baldwin, 2013; Kember, 2008; Hallinger & Lu, 2011), whether or not such strategies could be successfully adapted to Saudi undergraduate learners is at this time unknown. It is hoped that this study will help to provide an insight for decision-makers throughout higher education in Saudi Arabia. This study is important because it is, as far as is known, the first one to explore the perception of Saudi female and male lecturers and undergraduate students as participants in active

sessions, towards active learning, and it also determines the critical factors that impact on their views in this matter. Furthermore, the heuristic approach used in this study is unique as there are no other such studies in the field of instruction in Saudi Arabia. The research trend is still in favour of confirmatory studies and quantitative methods. Moreover, since transition to an AL form represents a fundamental transformation in the educational system in Saudi Arabia, this study makes it possible to understand how Saudi students and lecturers have reacted to this change and how it has influenced the quality of their learning and teaching experience.

1.4 Purpose of the Research

A primary purpose of this study was to comprehend how leadership, Saudi female and male lecturers and undergraduate students experience and realize AL and its future in Saudi Arabia. At the female campus of Princess Noura University in Riyadh, King Abdul-Aziz University in Jeddah and Umm Al Qura University in Makkah the participants shared their views about active learning.

Furthermore, the study aimed to explore what critical factors influence the participants' opinions about the AL environment as a means to promote the didactic process. These factors examined by exploring the experience of the students and lecturers and their views of the main aspects of AL and the challenges they encounter. Exploring the issues that constitute the experience of

teaching and learning in an active environment provided an insight into how students and lecturers should be supported in this new learning environment.

1.5 Personal motivation for embarking on this work.

As a physics teacher in a high school in Saudi Arabia for many years, the researcher realised that there was an issue in delivering the subject to students. She spent a long time searching for why students thought that physics and maths and other scientific subjects were difficult. Was it the nature of the subjects or the way that these subjects were delivered? It was clear that, although the subjects were not easy, the main issue was the way of delivering them. She therefore decided to study her Masters in Education. When she started it at Plymouth University, she chose a dissertation about Active Learning, with a particular focus on how to teach science subjects using this approach. The main aim was to find a way to make physics (and, of course, other subjects such as maths and chemistry) easier for students to study. After finishing the degree, she was recruited as a lecturer in a Saudi university and started searching for whether Active Learning was in use there. Some of the literature suggested that this new learning style had helped to improve students' understanding and performance when utilized in higher education in other countries. Unfortunately, Active Learning was rarely used in her university – it was a new initiative involving just a few lecturers. She had become convinced that Active Learning was likely to be the learning style that would eventually replace traditional learning in higher education. She therefore developed a PhD proposal based on an exploration of issues relating to the

implementation of Active Learning in Saudi Arabian universities. As a result of her research, she is now convinced that Active Learning strategies need to be encouraged in the Saudi higher education system to enhance students' learning skills and engagement.

As a lecturer, she will continue working to implement Active Learning in her university and other Saudi universities through conferences and workshops. She will also take advantage of a recent decision to amalgamate the basic education ministry with higher education into a single ministry, since this makes it easier to implement the same learning style in both basic education and higher education.

1.6 Research Questions

The major research questions underpinning this study are:

1. How do Saudi undergraduate students perceive active learning?
 - a. How do the students understand by using active learning?
 - b. What are the advantages of AL for students?
 - c. What challenges do Students being taught by AL?
2. How do Saudi lecturers perceive active learning?
 - a. How do the lecturers understand using active learning?
 - b. What are the advantages of AL for lecturers?
 - c. What challenges do lecturers employing AL encounter?

3. What are the participants' perceptions of the future of AL in Saudi Arabia?
4. What is the effect of AL on students' performance in Saudi universities?
5. What is the role of leadership and culture in AL as utilized in Saudi universities?
6. What factors impact AL implementation?

1.7 Research methodology

The qualitative research methods are often adopted to answer the “whys” and “hows” of behaviour, opinion, and experience-information that is difficult to obtain through a quantitative approach of data collection (Guest *et al.*, 2013). Qualitative data, typically in the shape of words rather than statistics, have continuously been the key element of certain fields such as anthropology, education, nursing, psychology, sociology and marketing.

The qualitative approach aims to provide an insight into regulatory and social processes but has perceptible and imperceptible sides (Van Maanen, 1979). Therefore, according to Harding *et al.*, (1990), data is collected on social measures as well as on the way people consider and behave in the research context. In this respect, Snape & Spencer (2003) state that qualitative research is a method of studying the social world, which seeks to demonstrate and analyse the culture and behaviour of humans and their groups from the subjects' viewpoint. Nevertheless, despite its strengths, qualitative research has its problems. Several of the

difficulties in the practice of qualitative research involve the following: difficulties related to access, the problem of clarification (Bryman, 1995) and the problem of analysing the data (Miles & Huberman, 1994). Bryman (1994) and Van Maanen (1979) argue that subjectivity, flexibility, lack of strict experimental control and determinism are typically associated with qualitative data gathering and analysis, leading to a reduction of their application to particular kinds of research (Kaplan & Duchon, 1988).

The inductive approach follows the interpretivist philosophy where theory is developed as a result of data analysis. The collection of qualitative data in a more flexible structure permits flexibility in the research process. There is an understanding that the researcher is part of the research process and less concerned with the need to generalize (Saunders *et al.* (2000:91). One reason for using the inductive approach is to confirm that all viewpoints are covered in terms of understanding the deeper structure of the research problem (Korpel, 2005). In this study one of the aims is to access the meaning that respondents attach to actions; interviews and a focus group will provide valuable in-depth data for analysis. Interpretivists believe that it is through personal interpretation and intervention that reality can be entirely understood. Interpretivism has a long tradition in the social sciences (Saunders *et al.*, 2007). The study of phenomena in their natural environment is vital to the interpretivist, who cannot avoid affecting the phenomena they study (Remenyi *et al.*, 1998). Interpretivists aim for a detailed

description and understanding of the phenomenon under investigation by way of observation and involvement (Van Maanen, 1979; Bryman, 1994).

1.8The Structure of The Thesis

The thesis is composed of ten chapters. Chapter One presents AL and demonstrates the significance of the research. It determines the purpose of the research explains the context of the research and outlines the research questions. Chapter Two gives a brief background regarding the Saudi educational system, which includes the stages of general education and higher education. It also provides a review of the context of the study, including the culture, economy, women's education in Saudi Arabia and dimensions affecting Saudi education. Chapter Three gives a review of the relevant literature on active learning, its definitions, its advantages and disadvantages and its strategies. It also refers to obstacles to the application of AL in the Saudi context, proposals to overcome such obstacles and studies on the use of AL and its strategies in a SA context. Chapter Four, this chapter examines the various factors that both assist and impede the implementation of AL in Saudi Arabian universities. Chapter Five describes methodology and begins with the differences and similarities among quantitative and qualitative methods. Furthermore, it considers the approaches used to gather data from interviews, the benefits and difficulties entailed the main interview questions and the pilot questions, observation, plans for deployment in the universities. The chapter debates a number of related issues, such as the sample for the study, validity and reliability, ethical issues and the data analysis procedure.

Chapters Six, Seven and eight analyse the research findings. Chapter Nine debates the effects of AL in Saudi higher education and offers some recommendations. The chapter also suggests areas of future research and presents some challenges and limitations as well as personal reflections on the course of studies and the insights gained from it. Chapter ten presents the discussions and explanations of the subjects that emerged from the data analysis.

Chapter 2: Context of the Study

2.1 Introduction

Education in the KSA has evolved markedly over the last few decades, and particularly in the new millennium. Billions of Saudi riyals have been spent to improve the education system. KSA has found it necessary to take a lead in the transition to a knowledge-based economy. It is certain that higher education significantly contributes to building a knowledge-based society, provided that it is based on a well-thought-out methodology and a clear long-term vision (Education Ministry¹). Many initiatives and projects have been implemented, one of the most important being the Afaq project. The aim was to develop a 25-year strategic plan for higher education, setting the vision, mission, strategic dimensions, and a practical implementation mechanism (Al-Mutairi, 2017). This chapter gives an overview of the Saudi situation, with emphasis on Saudi higher education and on AL in Saudi universities.

2.2 The Kingdom of Saudi Arabia

Saudi Arabia covers the greater part of the Arabian Peninsula. It is the homeland and the headquarters of Islam; and Makkah and Madinah are its holy cities.

¹ <https://www.moe.gov.sa/en>



Figure 2. 1 : Source: Ezilon Map (<http://www.ezilon.com/maps/>)

The history of the Kingdom is divided into three periods. The first began with an historic pact between Sheikh Muhammad ibn Abd al-Wahhab and Prince Mohammed bin Saud in 1745, which lasted for 79 years. The second began in 1824 and ended with Imam Abdul Rahman bin Faisal leaving Riyadh. That era, however, was characterised by chaos and conflicts between tribes. The third and final period of the region's history began in 1902, when King Abdul Aziz entered Riyadh. The rule of Al-Saud returned after the official unification of the Kingdom under the name Kingdom of Saudi Arabia (KSA) (Alromi, 2000). These periods leading to the foundation of the State, however, have not affected educational policy as education has only emerged in the third period (i.e. King Abdul Aziz phase). A royal decree was issued granting the Kingdom that name in September 1932. A Royal Order came into force on the 22nd of that month, and King Abdul Aziz became "the King of Saudi Arabia", the King's formal title being "Custodian of the Two Holy Mosques" (Al-Rasheed, 2002).

Saudi Arabia occupies a strategic position between the Red Sea in the west and the Arabic Gulf in the east. It has borders with Oman and Yemen in the south and Jordan, Iraq and Kuwait in the north. Other important countries like Iran and Egypt are close neighbours. The critical location of KSA makes it a crossroads, connecting the Western world, Africa, and Asia (Al-Farsy, 2003). Furthermore, it is in the middle of the strategically important Indian Ocean area.

KSA is the homeland of Islam and the land where the Holy Quran was revealed. Furthermore, the two Holy Mosques in Makkah and Madinah are located in KSA. Therefore, KSA has a special position in the Islamic world and plays an influential role in it (Al- Hugail, 2011). The importance of KSA is another reason (among others like culture and religion) that affects the type of education in the State. The Kingdom occupies 2.15 million square kilometres – approximately 70% of the area of the Arabian Peninsula and roughly 10 times the size of Great Britain. According to the General Authority for Statistics in 2017, the population of KSA was 32,612,641. Of these 20,427,357 were Saudi nationals while the remaining 12,185,284 were expatriates. Interestingly, more than 50% of the population are less than 24 years old. Today more than 95% of the population is settled, though most of the population was, until the 1960s, nomadic or semi nomadic. That is, until the 1960's most of the people were living in villages and did not have access to education, resulting in the majority of Saudis being uneducated.

The changes since then are due to rapid economic growth as a result of KSA's importance as a main supplier of oil to the world market, and there has been a consequent growth in urban development ever since. As mentioned above, a large proportion of the Saudi population is young. According to the General Authority for Statistics in 2017, 30% of the population was under 14. Chanchary & Islam (2011), state that Saudi institutions have been facing a growing demand for enrolment in primary schools. This has resulted in high numbers of pupils in classrooms (more than 45 pupils in the class) with a consequent reduction in the quality of learning, limiting the application of new technology or a new style of learning such as active learning. While the government tries to improve the quality, initiatives have often been undermined by an increasing demand for education on the other. Therefore, to support the continued growth in the Kingdom and meet the needs of a growing, young population, 25 % of the annual budget has been allocated for educational initiatives (Finance Ministry, 2011).

2.3 Saudi Higher Education

Higher Education and human development plans were given much attention by the government when the country was in a phase of development in the early 1970s. The Educational Policy charter for public education and higher education was launched in 1970. The policy provides that the objective of education in general is to satisfy the needs of the society and reflect its cultural standards and ways of living. The objectives and aims of education in any country represent the cultural values and beliefs of its citizens (Alebaikan, 2010, p.16).

The core educational objective of the Saudi education system is a continuance of its Islamic educational inheritance. These policies have not changed since 1970. The following is a translation of the purposes of Saudi Higher Education as indicated in the Educational Policy charter:

1. A full Islamic, evolutionist concept of the universe, humanity and life.
2. Linking education in all its stages to the proposed development of the Saudi State.
3. Conscious interaction with global, cultural developments in the areas of science, culture and arts, and tracking and monitoring the result of this interaction.
4. Encouragement and development of scientific research and critical analysis of such research.
5. Understanding of the environment and a deepening awareness of global issues through open contact with students from other parts of the world.
6. Encouragement of a global interchange of knowledge in the arts and sciences through the learning of other languages.
7. Special education for physically and mentally disabled students.
8. Programs to develop skills in gifted individuals and care of such students.
9. Implementation of training services and innovative studies to post-graduates who are in service.

Researchers in KSA accepted the Saudi education policy issued in 1980. Over the last four decades however, the state has dramatically changed politically, economically, and culturally, requiring a reconsideration of the education policy (Al- Hugail, 2011). The major part of the policy outlines the direction of Saudi education and its boundaries. The educational policy lists 236 items including constant objectives and goals, and others which could be refined over time. The constant objectives and goals are the foundations and principles underlying education in KSA, for example, the principles of faith, humanitarianism, development, science, justice and equal educational opportunities for citizens. On the other hand, the various objectives and goals are derived from the needs of the times and what is required in the fields of science, art and knowledge, and literature, etc. (Sfakianakis, Merzaban & Al Hugail 2011) claim is supported by Al-Ghamdi and Ibeaheem *et al.*, (2018) in that some goals and objectives could be modified over time and others are constant. Al-Mengash's (2006) study, which evaluated the policy, noted that not all of the statements in the charter had been implemented and gave a suggestion for improving and enhancing some statements in the policy. For instance, Al-Mengash highlights statement (41) of the goals and objectives of education, which is the prompting of research and scientific thinking. She emphasises that this statement is not efficiently applied in the education system, as teaching today is still built on memorising with no prompting to think, be inventive or debate with lecturers and peers.

Umm Al-Qura University (UQU) is one of the oldest universities located in western Saudi Arabia, being founded in Makkah in 1949. It has a good academic reputation in the fields of Arabic languages, Islamic studies, Islamic economics, and education. The university began with two colleges concentrating on Islamic studies and education. With the expansion of higher education policies in 1981, the university introduced faculties of natural and social sciences. UQU now has 23 colleges, providing undergraduate and postgraduate degrees in Islamic studies, Arabic language, education, social science, business administration, medicine, applied science, and engineering (Umm Al-Qura University, 2014).

The second university in Saudi Arabia was established in 1957 as Riyadh University becoming King Saud University (KSU) in 1982. KSU has 21 colleges, providing undergraduate and postgraduate degrees in Literature, Science, Management Science, Agricultural Sciences, Education, Engineering, Medicine, Applied Medical Sciences, Computer and Information Sciences, and Community Service, Tourism and Antiquities etc. (Saudi Arabia Information Resource, 2014). Until 2004 there were just two public universities located in Riyadh, the capital city of Saudi Arabia: King Saud University (KSU), and Al-Imam Muhammad Ibn Saud Islamic University, then the first university for females was founded by joining female colleges. Most universities accept both males and females, but the King Fahd University of Petroleum, Minerals in Dhahran and the Islamic University in Al-Madinah admit males only, and Princess Noura bin Abdulrahman University in Riyadh admits females only (Saudi Arabia Information Resource, 2014).

Saudi Arabia has increased its focus on providing Higher Education for females. The first public college for females, staffed by qualified lecturers, was founded in 1970. In 2008 these colleges were transformed into a public university and renamed Princess Nora bin Abdulrahman University. A new campus in Riyadh for Princess Nora University, with a capacity to enrol about 40,000 learners. The university has 13 faculties, 11 of which offer new disciplines of medicine, nursing, naturopathy, dentistry, business and management, information technology, and languages. Because of the effect of Saudi culture, the best available jobs for females are usually in education and health. Consequently, the university disciplines are concentrated on serving these employment opportunities (Alebaikan, 2010).

A number of higher education institutions have presented preparatory or foundation programmes to ensure that learners are adequately prepared for higher education studies. In some circumstances courses that had previously been provided as part of a degree programme have been transferred to the foundation or preparatory year, making it possible to replace them with more sophisticated studies to keep up to date with new developments in that area (OER, 2013). In other situations, the higher education degree has been moved to the foundation or preparatory year. Also, under these alterations some institutions have organised for the delivery of the preparatory or foundation studies to be subcontracted to another provider who has specific experience in the studies concerned. If these arrangements are appropriately managed, they offer the potential of meaningfully

improving the competence and efficiency of higher education programmes. However, there are pitfalls that have to be considered and some conditions that need to be satisfied (Ministry of Higher Education, 2011).

Foundation or preparatory studies are not part of a higher education programme. They offer the knowledge and skills learners need before they start their higher education programme. The general studies are designed to redress deficiencies in a secondary education programme. For example, English language studies in preparation for courses that will be taught in English, completion of studies in themes specified as preconditions for certain areas of study, such as mathematics, training in independent study skills, or use of IT for learners before they begin university studies that require those skills. The preparatory studies programmes may teach new learning skills, for example, AL skills, communication skills and thinking and learning skills. A consequence of this is that a bachelor's degree programme must still meet MHE requirements for a minimum number of credit hours and semesters in higher education studies in addition to completion of a foundation or preparatory programme (NCAAA, 2011).

In 1975, the Ministry of Higher Education was established to oversee higher education throughout the country. The Ministry launched a long-term plan, providing considerable resources to recruit the highly-skilled staff required to run the nation's increasingly advanced economy (Alebaikan, 2010). The plan's aims were to:

- Fund new institutions of Higher Education across the country and extend existing ones;
- Fund undergraduate and postgraduate programmes in most majors at these universities and colleges.

Saudi universities and institutions offer diplomas, bachelors, masters, and PhD degrees in diverse scientific and humanities specializations. A bachelor degree spans four years in the disciplines of social sciences and humanities and five to six years in the disciplines of engineering, medicine, and pharmacy. English is generally used in teaching the technological and science disciplines, though all other disciplines are taught in Arabic.

Since 2004, Saudi universities have increased in number from 8 to 25 public universities (Ministry of Higher Education, 2015). Most were already established colleges that were transformed into universities. Furthermore, a large number of vocational institutes, and a number of private colleges, have been founded lately; for instance, the Arabic Open University and the Prince Sultan University. Alkhazim (2003) stated that lack of funds was one of the three main issues or difficulties facing the Saudi Higher Education system, these are; difficulties in meeting increasing requests to admit more students, difficulties in meeting the required quality of results to satisfy work force needs, and difficulties in securing more resources (p. 483). In addition, substantial support and a generous budget has been given to higher education and research during the course of King Abdullah's monarchy since 2005. Seventeen years ago, the Minister of Saudi Higher

Education highlighted the constant support for and interest in higher education by the government (Al-Ankary, 1998). He stated:

'The budget for Higher Education increased from 55 million Saudi riyals (15 million US dollars) in 1965 to about 6 billion Saudi riyals (equal to 1.6 billion US dollars) in 1995. That is, the higher education budget doubled more than one hundred times over that period. The constant support and interest in higher education are revealed through the founding of a number of university campuses with high levels of educational facilities, infrastructure, laboratories, support complexes and vital services' (p. 4)

Saudi Arabia's budget for 2015 placed a high priority on education, spending 217 billion Saudi riyals on education and training out of a budget of 860 billion riyals. This is an increase of 25.2 % of total public spending, compared with 24.6 % in the previous fiscal year (Ministry of education, 2015).

In 2005 the project entitled 'Future Plan for University Education in the Kingdom of Saudi Arabia', [called AAFAQ], and the Future of University Education (2006-2030), provided a reasoned contribution to planning and developing Saudi Higher Education. AAFAQ is an Arabic term that indicates Horizons, which reflects this futuristic plan. The chief objective was to address the issues facing the development of higher education and to offer a plan for the next 25 years.

The chief objective of the AAFAQ scheme is to encourage the efficacy and effectiveness of the higher education system by the preparation of a futuristic, practical, ambitious and long-term plan that classifies vision, value, criteria for performance measurement, and resource demands. Its goal is to develop efficient use of human and financial resources; and emboldening universities to devote more resources to Research & Development (R&D) and community service. The

project is geared to produce a detailed application plan for higher education for the first five years and suggests a tool for institutions of higher education to use for sustained strategic planning and application of strategic and operational plans.

In 2010, the Minister of Higher Education's speech during the first higher education learner conference addressed the movement to transform Saudi society into a knowledge society (Ministry of Higher Education Portal, 2010):

'The premises of Higher Education expansion adopted by the Ministry are founded on specified basics, the most significant of them being supporting Saudi society to be transformed into a knowledge society. One of the most significant means to accomplish this transformation is to promote a knowledge economy by encouraging collaboration between those producing knowledge and community and service providers. To this end, there was encouragement for the universities to structure real and true partnerships with the production and services sector, together with the governmental and private sectors, local or international. Such transfer is justified if we consider the role of a university or educational institution is to balance producing knowledge and use of this produced knowledge, in relation to national development needs and needs of the employment market. Such balancing highlights the real role and the positive reflection of universities and Higher Education organisations in serving their communities, not forgetting their pioneering role in education and procedure research'. (para. 7)

2.4 University Lecturers

In order to teach in a Saudi University a lecturer is required to hold a bachelors, masters or PhD degree. In this study the title 'lecturer' is used to refer to all teaching positions at universities. The lecturer (faculty) booklet of King Fahad University of Petroleum and Minerals (2009) details the minimum criteria for appointing a lecturer:

'The minimum criteria for appointing at the professorial level are a doctoral degree from an accredited university, promotion to the rank from an accredited university, and meeting the University teaching and/or research requirements as well as service demands. The minimum requirements for appointing at the lecturer and instructor levels are a Master's degree or above from an accredited

university and meeting the University's teaching and/or research needs in addition to service demands. Additionally, suitability for employment at a research assistant rank is determined by guaranteeing that the applicant holds a Baccalaureate degree from an accredited university and meets the University teaching and/or research needs in addition to service requirements'. (p. 3)

In Saudi universities lecturers typically teach undergraduate courses in accordance with their qualifications. For instance, a possessor of a bachelor's degree can teach preliminary courses or be an assistant instructor, while a possessor of a master's degree can teach undergraduate courses only; a possessor of a PhD can teach any appropriate higher education course, including graduate studies. There is no requisite to have teaching training, despite the fact that it is preferred. The percentage of the Saudi lecturers in the universities is high, though there a number of non-Saudi nationalities. The majority of the Saudi staff gained their first degree in Saudi Arabia and their postgraduate degrees at home or abroad.

So far, university lecturers have been teaching using the traditional approach. The instructive, lecture-based lecture hall has been the standard pedagogical method in Saudi universities. It is noted that there is a shortage of independent learning and innovation in Saudi education. Furthermore, with the fast development in higher education, a movement to creativity in teaching strategies has started. For example, a number of seminars and workshops have been presented for lecturers, the purpose being to explain and foster AL strategies. Universities, for example KSU and UQU, have been providing professional development in e-learning and other teaching and researching skills for lecturers.

2.5 Active Learning in Saudi Arabia

Effective processes of learning in higher education require significant contributions from institutions. Implementation of AL has to be addressed by institutions to facilitate the best learning experiences and to overcome any difficulties of this new learning environment (Alebaikan, 2010). Hamdan (2014) highlights the vital role of institutions in creating the required policy, allocating resources, planning, and support systems to allow positive implementation of AL programmes. Furthermore, a quality experience for the learner is becoming one of the key purposes in most institutions and universities. The role of institutions in an AL environment certainly has a powerful effect on the educational experiences of both learners and lecturers (Althagafi, 2008). In this study, the AL courses were implemented at the institutional level, which might be influenced by the institutions' policy, planning, resources, and support systems.

The movement to a desired AL environment would not happen without established policy principles and strategic plans (Marwah, 2012). Suleiman and Abdelkader (2006) illustrate that institutions planning to implement AL should be able to discuss and debate policy questions:

“Why should higher education adopt AL methods? What is the nature of the educational experience that AL represents? How does AL challenge traditional assumptions and practices? How will AL challenge expectations for faculty members and learners? How will the adoption of AL be managed?” (p. 64).

Consequently, policy documents have to be developed (Bahoirth, 2014) to guide the planning and the implementation of AL, however so far there is still no public

or shared documented policy for supporting the implementation of active learning. Nevertheless, the Ministry of Higher Education has begun to encourage excellence in education (King Saud University, 2014), which in turn is prompting the universities to develop common policies for present and proposed educational institutions.

Some universities have started establishing units or centres to be dedicated to improving education and learning in the university. Of these UQU established a Centre of Active and Interactive Learning. The Centre aims to present a more comprehensive mechanism to improve education and learning in the College of Business Administration; the objective when founding the Centre was to provide support to members of the teaching staff to develop skills and methods and give them knowledge of state of the art teaching methods (<https://uqu.edu.sa>).

According to the website of the College of Business Administration, among the most important activities of the Centre is the planning and arrangement of interactive workshops, the development of curricula, quality assurance of learning processes, and encouragement to researchers in the field of education and pedagogy. For example, the Centre arranged several workshops for members of the college teaching staff in order to explain innovative methods of teaching. The workshops were introduced by speakers and experts in this field, including Professor Joseph Mick La Lopa from Bordeaux University.

The college provided the Centre with the facilities to host the courses and workshops and promote active learning; a 50-person class was established and dedicated to demonstrating teaching using active and interactive learning. The process included teaching male and female students through various smart class mechanisms and by running simultaneous asynchronous and combined programmes².

2.6 Active Learning methods applied in the College of Business

Administration

The College of Business Administration has employed the methods of AL in the system of curricula management and quality assurance of education. Students of the college use innovative methods and techniques of AL which are being applied on a limited scale in the programmes of other colleges nationwide. The method is based on facilitating the students to be fully involved in the process of learning and helping them to digest the concepts through interaction with the lecturer instead of the traditional indoctrination method.

2.7 National Transformation Programme (NTP)

“Saudi Arabia’s Vision 2030” has been adopted as a roadmap for economic and developmental action, its aim being to give the Kingdom a leading position in all fields. The Vision 2030 sought to identify the general directions, policies, goals, and objectives of the Kingdom (Saudi Arabia’s Vision 2030).

² (<https://uqu.edu.sa>)

To achieve the vision, ministries, universities, and government entities have had to restructure to align them to the requirements of this programme. To move forward with the proposed timelines all stakeholders need to restructure their management processes, and expand their competencies. Ultimately, this will enhance the level and quality of services provided to beneficiaries, and it will help achieve a prosperous future and sustainable development. The Council of Ministers has tasked the Council of Economic and Development Affairs with establishing and monitoring the mechanisms and measures necessary for the implementation of “Saudi Arabia’s *Vision 2030*”.

2.8 Vision 2030 and the Transformation of Education in Saudi Arabia

Saudi Arabia’s *Vision 2030* is ambitious in its proposals for educational reform. However, the success of this vision will depend on how well the reforms in the education system are implemented and how well they generate a better basis for employment of young Saudis. The government stated in the vision: we will prepare a modern curriculum focused on rigorous standards in literacy, numeracy, skills and character development. We will track progress and publish a sophisticated range of education outcomes, showing year-on-year improvements. We will work closely with the private sector to ensure higher education outcomes are in line with the requirements of the job market. They added in the vision documents:

‘We will continue to improve and reform our regulations, paving the way for investors and the private sector to acquire and deliver services – such as...education – that is currently provided by the public sector. We will seek to shift the government’s role from providing services to one that focuses on regulating and monitoring them and we will build the capability to monitor this transition.’

In the Vision, the state has not mentioned the time frame to privatise education, and neither does it specify whether it applies to basic education or both basic and higher education. The privatisation of education, however, is not an easy task, and according to the General Authority for Statistics, in 2017 private schools represented just 11% of the total schools in the country.

This outward-looking perspective sets the tone for much of the Vision. It is reflected in the strategic objectives of the NTP which include:

- Improving recruitment, training and development of teachers
- Improving the learning environment to stimulate creativity and innovation
- Improving curricula and teaching methods
- Improving students' values and core skills
- Development of financing methods and improvements in financial efficiency
- Educating students to address national development requirements and labour market demands
- Increasing Private Sector Participation in the Education Sector.

2.9 Conclusion

Saudi Arabia is a country that is endeavouring to respond to technological developments in education. It has been only fifty years since the first university was founded with twenty-one learners. Currently across the country there are fifty-two public universities and several private universities. KSA is one of the richest

countries in the Middle East and the nation's prosperity will enable it to achieve its plans and strategies.

People in Saudi Arabia have high expectations of the outcomes of the Vision 2030. They believe that the National Transformation Program will have a positive impact on their lives. Some universities have started establishing units or centres to be dedicated to improving education and learning in the university, and the use of active learning methods will certainly elevate the standards of educational courses. Chapter three explores in more detail the nature of AL and the wider implications of its use in the implementation of the Transformation Programme.

Chapter 3: Active Learning

3.1 Introduction

This chapter reviews the literature on active learning, with particular emphasis on the theories of social constructivism and social constructionism that provide the rationale and framework for active learning. The various strategies used in AL are addressed, and subsequently the future of AL is considered. It is noteworthy that some of the reviewed literature relating to these aspects of AL environment are from Arab countries and that to date, relatively few studies of this approach to tertiary education have been undertaken in these countries. Those that have however are examined here to provide evidence of Arab perspectives and experiences derived from the implementation of learning methods in Arab institutions.

3.2 Social constructivism and social constructionist theories

Educators constantly search for more effective approaches to learning and teaching, and this may entail developing new classroom strategies, new curricula, and new forms of assessment (Wilson & Peterson, 2006). However, educational reform requires a sound understanding of the basic theories that drive teaching, of how students learn, of what they should learn, and how educators can empower student learning. To explore these issues further this research has employed a framework that uses concepts of social constructivism and social constructionist theories, which highlight the role of culture and social contexts (Alebaikan, 2010).

These theories also consider the formation of the views of both groups and individuals with the objective of exploring in detail the experiences of the participants. Social constructivism and social constructionism contribute to our understanding of the generation of knowledge (Gergen, 1995), both theories having philosophical standpoints that help explain the ways people build meaning, and both have a similar view of reality, emphasizing that it is socially built (Burr, 2003).

Social constructionism asserts that knowledge is established from social processes and interactions, and consequently people make their own reality (O'Dowd, 2003). O'Dowd also claims that with regard to the effects of systematic enquiries, social researchers who adopt the constructionist attitude consider their interaction with their subjects as a major part of social reality. According to Burr (2003), there are four vital assumptions of the social constructionist attitude: a critical position towards taken-for-granted knowledge; that culture and history are particularly important in shaping knowledge; that knowledge is continued by social processes; and that knowledge and social action go together. Through these main assumptions Burr (2003) confirms that social constructionism requires us to be critical and careful of our assumptions about how the world seems to be. The nature of the world can be disclosed by observation, and what exists is what we imagine to exist through life experience and communication. She emphasized that knowledge derives largely from social interaction, which, in turn, is affected by our particular history and culture. This theory suggests that ways of understanding are

affected by time and place; in other words, they are circumstantial. Constructionists consider that our knowledge of the world is not derived from the world's nature as it really is, but that people build it between them. It is an entirely social issue including the interpretation of experience within a specific cultural context of assumptions, norms and values. Human beings share meanings via their membership in a common society or culture. Indeed, many of the things we regard as 'given' and 'constant' are really socially-derived and maintained by intricate and organised patterns of ongoing actions (Alebaikan, 2010).

Gergen (1995) stated that social constructionism puts human relationships at the centre of the learning process and that there are many styles of interrelated action at the micro-social level, all of which can contribute to the acquisition of knowledge. It must be noted, however, that there are differences between constructivism and constructionism: "It would appear useful, then, to reserve the term constructivism for epistemological considerations focusing exclusively on 'the meaning-making activity of the individual mind' and to use constructionism where the focus includes 'the collective generation [and transmission] of meaning'" (Crotty, 2003. p. 58). Thus, the scope of the individual's control of his/her knowledge generation is the key alteration that could be demanded by writers and researchers who distinguish between these two terms (Burr, 2003). Nevertheless, social processes do play a significant role in both theories. Social constructionism and constructivism are used mutually by several writers (Burr, 2003) when considering ways of knowledge-building over social interaction (Schwandt, 1997).

Because the purpose of this study is to comprehend and explore how participants constructed their own perspectives and meanings via social interactions in a specific cultural context, the assumptions of these two theories have been adopted and used mutually. The components that generate the assumptions of these two theories are social interaction and culture, both of which contribute to cognitive development. Social constructivists identify the influence of the social environment, religion, and culture, on how people build their realities and perception of their world. According to Berger and Luckmann (1967), meaning is developed via the interactions of social processes including people, religion, and language, and as discussed below, these are predominant features of society.

Culture, the learning environment, social interaction, and cognitive development all affect each other in the process of knowledge generation. Culture and religion in Saudi Arabia not only influence people's attitudes, behaviour, and practices but shape the building of the reality of their lives (Alebaikan, 2010). A study by Yamani (2000) confirmed that for many "Saudis the rules for social behavior and for religious observance are one and the same" (p. 12). This makes social constructivism and social constructionist theories suitable for understanding the perceptions of lecturers and undergraduate students in regard to AL in Saudi society. Indeed, a distinctive feature of this study is that it takes close account of the social and cultural influences on how the participants acquired knowledge.

Lecturing, a time-tested and venerated teaching style is still the most common approach to instruction in higher education all over the world (Svinicki & McKeachie, 2011; Lambert, 2012, p. 25). It can be particularly effective as a medium for learning when presented by inspiring lecturers who are also talented orators. Nevertheless, lecturing persists because it is a means of delivering content to large numbers of learners in large venues in a short time (Simeoni, 2011). Millis (2012) indicated that lecturing has several positive features: it is managed by the lecturer who can use it to complement written texts through the provision of cutting-edge material; it gives the lecturer assumed 'control' in the classroom, although ironically learners may not really be benefiting fully from the flow of material as they are passive or otherwise distracted; it allows the lecturer to offer crucial information to all learners equally at the same time; and it can provide inspiring speakers with the opportunity to motivate learners. Notwithstanding these apparent advantages, a significant number of studies in recent years - especially in the fields of cognitive science, neuroscience, psychology and education (Al-Mutairi, 2017; Hilman Maas, 2019; Abu Haj, 2016; Hashemi, 2016) provide evidence that there are potentially better and more educationally effective ways of fostering learning. One approach is by way of 'active' learning, which is considered to be a vital element of what is now usually called 'learner-centered' or 'learning-centered' teaching (Weimer, 2002). As Hestenes (2012) stated, learners have to be active in developing their own knowledge.

3.3 Active Learning

AL is usually described as any instructional method that engages learners in the learning process (Prince, 2004). In contrast to passive-learning methods, where the responsibility of education rests with the educator, AL is a student-centered, inductive process. It engages learners by requiring them to do purposeful activities and think about what they are doing (Bonwell & Eison, 1991). Therefore, AL does not merely entail performing activities; it is an opportunity for learners to reflect, analyze, evaluate, synthesize, and communicate (Fink, 2003). Research indicates that AL results in a range of positive outcomes involving improved learner attitudes (Bleske-Rechek, 2002), increased motivation (Preuss, *et al*, 2013), developments in student thinking and writing (Bonwell & Eison, 1991), memorization of key information (Cherney, 2008), and enhanced examination performance (Yoder & Hochvar, 2005). As explained by Chickering and Gamson (1987) and Bloom (1956), learners who engage in AL should read, write, discuss or engage in solving problems, such activities requiring higher-order thinking skills; for instance, analysis, evaluation, and synthesis. Consequently, AL is a method by which learners are actively or experientially involved in the learning process and where there are various levels of activity depending on learner participation.

AL can be defined as a method of learning and education aimed at providing an educational environment which stimulates the student's responsibility for self-education, and involves active participation through reading, research, and the use of higher mental functions (Smith & Cardaciotto, 2011). It is usually structured and

well-organised because if classes are to provide effective settings for learning then teachers must be fully prepared with a range of challenging tasks, problems, texts, projects, experiments or other activities for the students. Moreover, these activities take place under the guidance and supervision of the educator in an atmosphere of intimacy and cooperation between learners in each class or group (Russell-Bennett, 2010).

Mahri (2017) and Al-Mehdawi (2013) confirm Dewey's (1938) view of the importance of placing the learner at the centre of the learning process and of the acquisition of learning through experience. Therefore, the responsibility of the university is to provide activities for learners commensurate with their circumstances. Achievement is measured by the extent of the learner's growing ability and expertise in dealing with new situations. This is achieved through their analysis of those skills, through discussion with others, through questioning, by performing written tasks, and by engaging in activities which oblige them to respond to problems, ideas, and opinions expressed in various ways depending on the subject or topics under discussion (Smith & Cardaciotto, 2011). The importance of AL is reflected in the positive results achieved by the learner in terms of his/her knowledge, skills, and attitudes. These results have been confirmed by research on AL (Zakaria, 2016). According to Basham (1994), AL constitutes a bridge which helps learners to cross the gap between the learning process and the educational objective. It is incumbent upon the learner to learn much more than simply how to listen; he/she should also be able to read, write, discuss, reflect,

exchange views, accept criticism, reach the correct results based logically on consultation, and respect the views of others. Chickering and Gamson (1987) reported that a team of researchers reached the following conclusions on active learning: learning is not a spectator sport; learners do not learn a great deal by sitting in the classroom listening to educators and memorizing what is said to them; rather learners should talk about what they are learning and link it to previous experiences, applying the knowledge to their daily lives and making what they learn part of themselves. Gibran (2000) and Youssef (2016) proposed that AL depends on other elements:

1. Direct action: this provides learners with concrete experiences and helps them to form abstract concepts.
2. Learning by doing: combining physical activity with mental activity in interactions with objects; to explain the effects of these interactions, connecting interpretations to a full understanding of the world.
3. Internal motivation: the learner derives motivation for AL from within; his/her personal interests lead to questioning and the need for exploration, experimentation, and the building of new knowledge
4. Problem Solving: the essential experiences through which learners develop their ability to think when faced with unexpected real-life problems; it is linked to what they have learned about the world, raises their awareness, and helps them in the solving of unexpected situations.

In my view, the provision of these elements makes AL dynamic more positive for learners. It increases motivation to learn and the desire for discovery and interaction with the phenomena around them. Interpretation and construction of knowledge based on understanding and awareness enables learners to acquire the basic skills by which they continue learning outside of the classroom.

AL is the basis of what is known as 'authentic learning', which is one of the recent trends designed to achieve maximum growth for the learner - mental, emotional, social, and physical (Al-Rashidi, 2015). Khalil Al-qaisi (2016) stated that the characteristics of AL consist of successive planned and meaningful activities and actions carried out by the learner. Moreover, the input of the learner cannot involve a lecturer handling input in the learner's stead, and that all this must occur in the form of different organisational learner-centered activities.

AL is particularly effective when implemented within a framework founded on a powerful theoretical model of how learning happens in the classroom. Kolb's Model of Experiential Learning (Kolb, 1984), derived from Lewin's model of Action Research, illustrates the key elements of experiential learning as shown in figure 3.1.

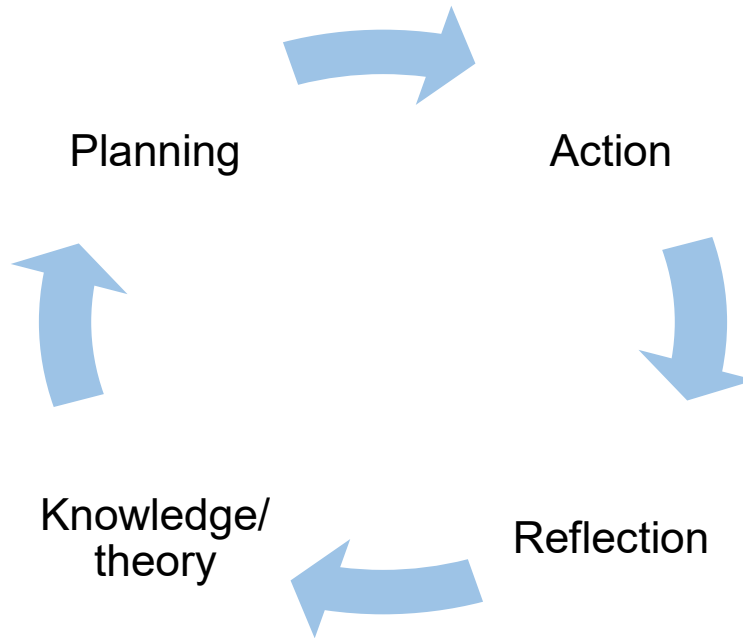


Figure 3. 1: Kolb's Model of Experiential Learning (Kolb, 1984)

1. *Action*: the learner implements some kind of activity linked to the lesson or subject.
2. *Reflection*: the learner reveals what he/she did and what occurred as a consequence of their activity. This can be conducted via journals, through small or large group-discussions, and by free writing.
3. *Knowledge/theory*: the learner uses the outcomes of the reflection to develop knowledge and theories which, in turn, help additional learning as the learner is able to visualize his/her own theories, not accepting the theory of the lecturer.
4. *Planning*: founded on the learner's theories, they plan what to do next and expect the outcomes of extra activity. This process moves the learner into

levels of thinking that are higher than the mere recalling or reciting of information or facts.

A favourable psychological environment and suitable university facilities are necessary for the AL to take place and to be beneficial (Zahrani, 2012). Kojak *et al* (2008) confirm this, saying that an AL environment would contain a rich variety of sources of learning and would be infused with an atmosphere of tranquillity and fun. Additionally, the environment would be dominated by an atmosphere of freedom and autonomy, encouraging learners to be motivated and to think independently. Al-Ghamdi (2011) stated that the main characteristic in an AL environment would be the shift from a focus on the lecturer to a focus on the learner, making it more exciting and motivating, and harmonizing the diversity of learning environments.

There are numerous other aspects and benefits of active learning. For example, Olives (2002) identified a number of other characteristics: firstly, well-prepared lessons may provide a real-world environment linked to contemporary issues and problems, and from these scenarios the learner applies what he/she has learned. Secondly, student collaboration can enhance the construction of knowledge by means of social negotiation. Thirdly, these various learning situations emphasise the building of knowledge rather than merely listing or repeating acquired facts and details. Fourthly, AL methods used in the classroom can enable students to use similar strategies in their private study and in other non-classroom situations.

The characteristics of learning by way of activities include seeking to acquire knowledge, gaining excitement from understanding new concepts, and utilising appropriate educational resources that motivate learners. Such characteristics also embrace accepting other people's opinions and criticisms, and manifesting enthusiasm as a catalyst to reaching the maximum ability to organise information and show it in its true form, giving the learner a tangible start in attaining targets in an orderly manner. Freire (2001) believed that educators have to use the classroom as a democratic setting for learning and as a place for the presentation of critical ideas. He commented that the teaching/learning environment should be founded on participation, dialogue, democracy, and activism. However, Freire's thoughts were not adopted widely in the Saudi educational environment; his approach called for more interaction between teachers and students than the Saudi institutions were providing. The Saudi higher educational system plays an important role in accepting or rejecting such beliefs; consequently, this might be improved with *Vision 2030*, which focuses on educational reform.

3.4 Active Learning Strategies

Teaching in a university setting is becoming more complex (Holmquist *et al*, 2002). It is no longer enough for the academic to be competent in a field of specialization and to 'profess' an essential base of knowledge for a lecture hall to be full of willing learners. Today's effective university lecturers should be prepared not only to contribute in-depth knowledge of their discipline but also to know something about students and how they learn. Academics are furthermore expected to cultivate

skills in various approaches of teaching and evaluation in which they may have had little or no preparation. Even though these new expectations are troublesome for many lecturers, research indicates that supporting active approaches is the most efficient way to facilitate student learning (Rouse, 2007; Johnson *et al.*, 1991; Anderson & Adams, 1992; Chickering & Gamson, 1987; McKeachie *et al.*, 1986). Learners are more able to absorb, understand, and remember material learned from active engagement in the learning process, therefore Friel (2009) said that there is a need for change from the traditional lecture to more active forms of knowledge-acquisition. However, some academics are reportedly uncertain of their preparation, experience, and skill in implementing the needed change (Bonwell & Sutherland, 1996).

Bonwell and Eison (1991, pp. 59-64) have identified five commonly-cited barriers to the use of AL strategies in higher education: it may not be possible to cover as much content in class; AL requires too much preparation; it is difficult (or impossible) to use AL methods in large classes; resources and materials may be lacking; and there are many risks to be considered, involving how colleagues will perceive the legitimacy of the methods, and how learner assessments might be conducted. These are valid concerns and not easily dismissed, so it is understandable that some academics are reluctant to change their approaches (Hénard and Roseveare, 2012). At the same time, researchers such as (Friel, 2009) indicated that students learn best when their intellectual engagement is high (a condition that is not likely to happen consistently in the traditional lecture-style

class). Consequently, this study addresses two specific AL strategies: cooperative learning and problem-solving.

3.4.1 Cooperative Learning

Kojak (1992) explored the key elements of cooperative learning and, as later endorsed by Maliki (2010), proposed that it requires learners to work with each other, to share pertinent information during curriculum-related activities, to teach each other, and effectively develop their personal and social skills through periods of interaction. Al-Sharif (2000) stated that learners learn collaboratively through their presence in small groups (albeit with different levels) in order to achieve a specific objective - the accomplishment of a particular task - with each learner being an active partner responsible for the success or failure of the group. Such learners work in groups or in pairs to achieve learning objectives (as defined by Obaidat *et al.*, 2007).

Cooperative learning is always active learning, however not all AL is cooperative (Keyser, 2000). According to Johnson and Johnson (2000), cooperative learning is a method of group work that increases the scope and level of learning, thus elevating satisfaction by participants and contributing to the working of a high-performance team. A broad and growing body of research confirms the efficiency of cooperative learning in higher education (Suliman, 2005; Algarfi, 2010). Relative to learners taught traditionally, for example, with instructor-centred lectures, competitive grading, and individual assignments, cooperatively-taught learners

tend to attain higher academic achievements, display greater perseverance until graduation, exhibit high-level cognitive and critical thinking skills (Terenzini *et al.*, 2001), and display elevated comprehension of learned material (Friel,2009). Other advantages are that students are able to devote more time concentrating on relevant tasks, there may be fewer distractions and disruptions to class activities (Baume,2002), lower levels of tension and anxiety (Haciomeroglu,2012), greater motivation to learn and achieve (Williams & Williams, 2010), a heightened ability to view cases from others' perspectives (Nukpe,2012), more supportive and positive relations with peers, more affirmative attitudes to subject areas, and higher self-esteem (Mabrouk,2007).

There are many explanations for cooperative learning being more effective than knowledge acquired by way of lectures (Felder & Brent, 2006). The notion that learners learn more by doing something active rather than by passively observing and listening has long been known to both cognitive psychologists and efficient lecturers (McKeachie, 2002) and cooperative learning is inherently an active mode. Moreover, cooperation promotes learning in a number of ways. Weak learners working individually are likely to abandon their work when they encounter a problem, but by working cooperatively they tend to be encouraged to persevere (Bransford *et al*, 2000). Conversely, it is to the benefit of strong learners too, because when they are faced with the task of clarifying and explaining material to weaker learners, they may discover gaps in their own comprehension and rectify their own shortcomings (Felder & Brent, 2007). Learners working alone may delay

completing assignments or fail to complete them altogether, but once they know that others are relying on them, they are likely to be motivated to do the work at the appropriate time (Mabrouk, 2007).

Felder and Brent (2007) stated that despite the demonstrated benefits of cooperative learning, some academics who have used such methods report that they have encountered resistance and sometimes open hostility from the learners. Apparently some more-capable learners complain that they are held back by their slower colleagues; weak or unassertive learners argue that they are bypassed or ignored in group sessions, and, overall dissatisfaction can be expressed when some team members fail to contribute equally. Knowledgeable and patient lecturers find ways to deal with these problems, however others become frustrated and return to the traditional teacher-centred instructional model, which is a loss both for them and for their learners. Kariman (2008) pointed out a number of obstacles to cooperative learning; these include teachers' lack of access to adequate training in cooperative learning (ideally, they would have three years of training in the subject), too many students per class, inadequate classroom facilities, the lack of contributions and participation by some members of the group, and the possibility of strong individuals inappropriately imposing their will on others in the group. However, the use of learning materials must be presented in a manner conducive to learning through collaborative questions and exercises, and this approach may outperform other teaching methods in raising the achievements of those being educated.

Cooperative learning is teaching that includes learners working in teams to achieve a common goal in settings that include the following elements (Johnson & Johnson, 1998):

1. Positive interdependence: members of the team have to depend on one another to accomplish the objective. If any team members fail to do their part everybody suffers from poor outcomes (Maliki, 2010).
2. Individual accountability: all learners in a group are held responsible for doing their part of the action and for contributing to the material to be learned (Mufti, 2007).
3. Face-to-face promotional interaction: though some of the teamwork may be performed individually, some should be done interactively, with members of the group providing one another with reactions, challenging reasoning and deductions, and teaching and encouraging one another (Rubaie (2011).
4. Suitable use of collaborative skills: learners are encouraged and helped to improve and exercise leadership, to build trust, to participate in decision-making, to communicate, and to foster management skills (Bilawi & Abu Jelban, 2007).
5. Group processing: team members set group objectives, evaluate what they are doing as a team, and identify alterations they will make to perform more efficiently in the future (Kojak, 2006).

Cooperative learning is not just a synonym for learners working in groups. It is an example of AL whereby learners benefit from one another in many practical ways.

3.4.2 Problem-Solving

Problem-solving is common to all forms of human behaviour; students learn to solve problems and, in the process, learn how to make sound decisions in their lives. Events in life are often unpredictable and unexpected, and in such a world an individual's ability to adapt and solve problems is crucial (Hartman *et al*, 2013). As Alamen (2001) explains, problem-solving is not a new subject. Dewey (1938) applied scientific thinking to the resolution of humanitarian problems, extending his approach from the simple problems of everyday life to complex social conundrums and abstract scenarios. Problem-solving is considered the highest type of learning by Gagné (1985) and crosses into the principle enunciated by Bruner (1966) who stated that what is important in the learning process is not the detected result, it is the series of processes leading to this result. A key educational factor is teachers' knowledge of how students think when faced with the unfamiliar problems. Therefore, it could be considered that the solution to problems should be a primary goal of all teaching materials.

Yeo (2008) indicated that problem-solving is a method in which information and skills acquired previously are used to meet the requirements of new situations; former lessons are reorganised and applied to new scenarios. One way of helping students find solutions to problems is to encourage research, questioning, and experimentation (Huwaidi, 2006). Solving problems also requires the ability to analyse and synthesise the elements of the situation faced by the individual (Ferreira & Trudel, 2012). The solutions to problems depend on the manner in

which the individual deals with different situations using the information he/she has acquired, together with his/her former skills.

Mari & Alhaila (2002) and Wee & Tan (2004) believe that solving problems as a method of education requires a number of conditions for teachers and students as follows:

For teachers

- Must have the ability to show how to solve problems in a structured scientific manner.
- Must have personal knowledge of the principles and techniques for solving problems.
- Should have the ability to set goals in accordance with suitable methods.
- Need to select problems that arouse students' interest, that challenge their minds, and that carry the possibility of a resolution in the light of existing capacities and capabilities.
- Should be able to provide students with real-life problems that relate to the needs and goals of the students' current or future education and training.
- Should be capable of helping students to form a pattern, model, or strategy appropriate for the problems they face.
- Must be willing to experiment with new strategies for solving problems, enabling the student to formulate a holistic view of the problem.

For students

- Should possess appropriate skills and background knowledge before attempting to solve problems.
- Should have social and communications skills which will enable them to work constructively with others.
- Should have the maturity to accept responsibility for their own learning.
- Should be willing and able to continue their collaborative learning activities outside the formal classroom setting.
- Must be willing and able to take responsibility for the timely and accurate completion of a section of a team project.

Educational foundations for problem-solving methods are based on specific and clear objectives, and are thus consistent with the nature of the learning process. Such methods may foster a spirit of research and exploration, and they enable students to reach results that are consistent with methods of scientific investigation. They focus on the activities of the individual in solving problems and are aligned with modern teaching approaches that place the individual at the centre of the educational process (Savery, 2006).

Kanet and Barut, (2009) and Saadeh *et al* (2011) described the key features in teaching problem-solving strategies as follows: explaining the steps necessary for resolving the problems; focusing on strategies for solving problems; offering a selection of problems based on the needs of the students; arousing the interest of students in the issues raised; organising students' contributions to the

development of action plans; linking the problem and the solution to the information needed by the students; nurturing the necessary skills; distributing roles among students; monitoring and following-up the work of students; assessing the performance of students; encouraging students to be patient in dealing with problems that may be difficult, and locating evidence relevant and appropriate to resolving the problems. It follows from the foregoing that the role of the lecturer lies in selecting suitable problems and providing preliminary drafts of the steps to solving each problem, taking into account both the needs of the students and the curriculum (Wee & Tan, 2004).

3.5 Active Learning in Arab Schools

Relatively little research has been conducted into the use and effectiveness of methods of AL in the context of Arab classrooms, though several studies have been undertaken in Egypt, Oman, Kuwait, and Saudi Arabia. According to the website of the Umm AlQura University in Makkah (<http://uqu.edu.sa.com> 20th of May 2014), and the website of the King Fahad National library (<http://www.kfnl.gov.sa/> 20th of May 2014) there are only a few studies on AL in Saudi Arabia, the majority being masters' dissertations. These studies have investigated AL applications in some areas of the Saudi curriculum.

There have been several academic investigations into the relative effectiveness of the various methods, and while they did not identify one 'best' teaching method they all confirmed the marked benefits of active participation in the learning

process. For instance, using a quasi-experimental approach with upper-primary Jordanian students, Zoubi (2003), recorded measurably higher levels of achievement in regard to the children's critical thinking skills. Similar benefits were reported by Shammari (2010) who sought to assess the benefits on creative thinking of brainstorming, simulations, and two-way stories. In that investigation, conducted in the Kuwait school system, the author noted heightened interest and motivation by students resulting in noticeably improved overall grades among the experimental group.

Techniques for promoting AL can be applied in most, or all, areas of learning, at all levels - primary, secondary and tertiary. It can be applied in such 'academic' subjects such as languages, mathematics, and economics, though it takes both imagination and effort by teachers to prepare lessons that contain elements of activity (Althagafi, 2008). Subjects that have been traditionally book-based can be adapted to include activities. Of course, science subjects have long been conducted in laboratories, and more recently studies of language and history have made use of sources other than text books and audio-recordings (Al-Otaibi, 2012). One pertinent study into an individual subject was performed by Saudi researchers Suleiman and Abdelkader (2006) who tested the effectiveness of active learning techniques on innovative thinking by primary students attending science and mathematics classes. Using a sample of 166 children (80 in the experimental group and 86 in the control group), they demonstrated that AL can significantly elevate creative thinking, imagination, and innovation. Using both qualitative and

quantitative measures they found statistically significant differences between the two groups, the authors concluding with strong recommendations for the inclusion of more AL in teacher-training courses. In a similar vein, Harbi (2010) reported strong benefits to students of physics in Saudi secondary schools, and Al-Ghamdi (2011) assessed active techniques in science lessons for Saudi girls, noting that the main obstacles to their use was inertia by teachers and a lack of suitable teacher training. Also focusing on science education, Zaidi (2008) sought to assess the influence of AL specifically on the development of creative thinking and innovation. Using an experimental method with 56 Saudi primary students who were learning a topic called 'Work and Energy', she compared one group, which participated in a range of simple experiments designed to teach the main principles, with another which used traditional teacher-focused classroom-based demonstrations. Employing a quantitative analysis, she confirmed that the experimental group were later able to apply the basic principles in creative ways in order to deal with problems.

The impact of AL on the teaching of subjects not usually considered suitable for such methods has also yielded positive outcomes. Using a quantitative research process, Al-Otaibi (2013) demonstrated the effectiveness of more-active classroom lessons on Saudi secondary students of Islamic jurisprudence, and in Egypt, Rashwan and Najdi (2009) achieved markedly improved results when using active techniques such as role-playing and problem-solving to teach life-skills to girls. Marwah (2012), too, taught life-skills to students in Gaza, and with an

experimental methodology she was able to demonstrate the long-term benefits to the children's learning. Working with secondary students in Oman, Ahmad (2007) adapted a range of classroom-based and outside activities to demonstrate the practical application of economics – a subject usually taught from books in teacher-centred lessons. He noted that the students achieved an elevated understanding of the important principles, concluding that a diversity of activities fostered a better understanding of the topics and more positive attitudes to the subject.

Many of the studies cited here highlight the importance of teacher-training. For example, Saadeh *et al* (2003) examined the influence of pre-service training on the use of AL by Palestinian teachers. The researchers noted marked increases in the implementation of active-learning techniques in a range of school subjects, and they found that the main controlling factors were academic specialization, qualifications, and the number of training courses in which the teachers had participated. Likewise, Mautrofi (2010) insisted that training was the key; working in a university setting he stressed that university lecturers can achieve improved outcomes if they encourage students to acquire core principles and skills by way of practical involvement. Clearly, training is a central controlling influence on this aspect of teaching.

In conclusion, it can be seen that AL can be applied at all levels for all subjects, and for both general and specific topics within curricula. The benefits have been confirmed in many research projects like those described above, and a continuing

finding is that teacher-training is essential. School teachers and university academics at all levels will use active methods if they know how, if they are aware of the range of activities that can be applied in different disciplines, and if they are convinced of the benefits to their students. This research project explores this issue further, though it addresses a particular area of specialisation not previously investigated. Particularly cultural and social impacts of SA on the way students construct their worlds and their learning.

3.6 Conclusion

The studies reviewed in this chapter confirm the strategies, the impacts, and the pedagogic benefits of AL in various contexts. However, writers such as Bahourth (2014) highlight the requirement for more research on the respective AL techniques applicable in particular tertiary educational courses and programmes.

According to Al-Otaibi, 2012:

'When AL is well understood and properly implemented, higher education will be advanced in a manner not seen since the extension of higher education in the late 1940s. The challenge now is to gain a deep understanding of the need, potential, and strategies of AL to method the ideals of higher education' (p20)

In the rapid development of higher education in Saudi Arabia, several studies (Harbi, 2010; Zahrani, 2012) have explored the implementation and influence of AL strategies. Nevertheless, studies on AL in Saudi Arabia are still relatively scarce (Astal, 2009), and it is anticipated that this study will make a contribution to explaining the features of AL which could help to yield positive attitudes for Saudi

students towards AL. Furthermore, this study seeks to identify the factors which may support AL implementation.

In conclusion, through exploring the perceptions of the participants, the nature of their learning experiences can be assessed by their perceptions of such related elements as technology, learning flexibility, and learner engagement. The literature reviewed in this chapter illustrates the key aspects of AL that affect students' experiences in AL courses. This research study has considered whether the following issues have influenced the participants' perceptions: the participants' understanding of the concept of AL (this entails the strategies and the rationale that are important factors of active learning); the experiences of students who have used AL techniques; the influence of Saudi culture on the implementation of active learning; the experiences of the lecturers with regard to AL techniques.

Moreover, this work seeks to describe the participants' opinions regarding the future of AL in Saudi higher education. As the backgrounds of the participants affect their insights, the consequences will be explained so that the voices of both learners and lecturers can be taken into account (Abu Haj, 2016).

Chapter 4: Factors Affecting The Implementation Of Active Learning

4.1 Introduction

This chapter examines the various factors that both assist and impede the implementation of AL in Saudi Arabian universities. There are many factors that might be considered in the implementation of AL that include: leadership; national culture; resistance to change; technology; professional training programmes; lecturers' level of education; lecturers' experience; educational environment and social networks. Although these factors might have an impact on AL implementation, the special areas of interest in the study are the human factors which might have a direct impact, such as leadership, national culture and professional training.

Leadership can impact organisational outcomes directly and indirectly. In any organisation, the leader holds the core position, plays an important role for the entire organisation, and is expected to take responsibility for successes and failures (Boonyachai, 2011). Many studies show that leadership has a positive impact on organisational issues such as commitment, innovative behaviour, and implementing positive innovations in the field of education.

Culture influences all aspects of our life, including education. In addition, there are strong links between culture and learning that are reflected in how people prefer to learn and how they tend to process information. Furthermore, culture plays a role

in conditioning and strengthening learning styles and partly explains why teaching approaches used in specific parts of the world may be more effective or less effective when transplanted to another locale.

Providing training on how to use AL strategies can be considered as a cornerstone of adopting this style of learning for lecturers and students alike. Professional training programmes could have a major impact on enhancing faculty members' teaching capabilities. It can help the adoption of this style of learning for both lecturers and students, and it could have major benefits for enhancing faculty members' teaching capabilities.

These factors will be reviewed below, and they are connected to programmes introduced by the Saudi environment; then following is an exploration of their relationships with AL implementation in Saudi Arabian universities.

4.2 Leadership

The effectiveness of enterprises and endeavours in countries, organisations, and communities depends largely on leaders, and so the nature and quality of leadership has been closely examined by social researchers. Initially, researchers focused on aspects of personality, on the personal qualities of leaders, and on their roles (Yukl, 2010; Yammarino & Dansereau, 2009; Northouse (2010); Yukl, (2006); Kofman (2006)). From early studies (Stogdill, 1974; Burns, 1978; Bennis and Nanus, 1985; and Bass, 1985) emerged various trait theories and behavioural

theories of leadership. Later, concepts of leadership broadened to include the importance of the interplay between leaders and followers, together with the context within which they functioned (Alomiri, 2015).

Leadership can be defined in many ways (Amin, 2012), but so far there has been no agreed definition of either the concept of leadership or its nature (Alomiri, 2014). However, several definitions are helpful and relevant to this study and they encompass all elements of leadership (such as people, goals, ability, and influence) though it is acknowledged that they are not definitive (Yukl, 2002). Consequently, to define leadership it is necessary to give attention to many factors, and in particular personal traits, leaders' behaviour, task goals, and context.

Yukl (2006, p. 8) has defined leadership as 'the process of influencing others to understand and agree about what needs to be done and how to do it'. Northouse (2010) considers leadership mainly as a process between the leader and the followers to influence others to achieve a common goal. Kofman (2006, p. 9) defined leadership as 'a process by which a person sets a purpose for others to follow and motivates them to pursue it with effectiveness and full commitment'. These definitions contain several components that describe leadership as: a process; an influence; being within the context of a group; a means to goal-attainment; and leaders and their followers sharing the same goals (Alomiri, 2015). Bass (1990) defines leadership as a group process whereby the leader holds a central place and embodies the will of team members, and this process of

interaction within the group shapes the leadership. This latter definition is particularly appropriate to the current research context where vice chancellors, deans, and departmental heads interact with their faculty members, and this process of interaction within the group shapes the leadership as well as determines the results of their endeavours.

Leadership can impact organisational outcomes directly and indirectly. In any organisation, the leader holds the core position, plays an important role for the entire organisation, and is expected to take responsibility for successes and failures (Boonyachai, 2011). Studies generally confirm that leadership influences organisational outcomes and performance (Bass & Avolio, 1990; Bass, 2008; Yukl, 2010). Many studies show that leadership has a positive impact on organisational issues such as commitment, motivation, loyalty of followers, project quality and innovation, sales performance, job satisfaction, effectiveness, job success, career satisfaction, and innovative behaviour (Pitman, 1993; Misra, 2007; Kelloway & Barling, 1993; Keller, 1992; Garcia, 1995; Walumbwa *et al*, 2004; Lowe *et al*, 1996; Riaz & Haider, 2010).

The literature on leadership shows a progressive pattern which starts with a focus on leaders' attributes and characteristics, then emphasizes their behaviour, and later examines the nature of leadership (Aldraehim *et al*, 2012). In the 1970's, leadership literature changed so that particular attention was given to a 'new leadership' approach which recognised good management as being more

important than leaders mainly getting the work done with their followers and maintaining good relationship with them (Bass and Avolio, 1994). The emergence of the 'new leadership' paradigm has changed the emphasis from the qualities of individual leaders to the process of leadership.

Burns (1978) regarded transformational leadership and transactional leadership as being opposites. He emphasises leadership per se rather than just focusing on the interactions between the leader and followers, and this emphasis enables an analysis of the main forces and processes involved (Northouse, 2010). The differences between the two styles lies in how leaders and followers behave and how they achieve their goals. The new leadership pattern encompasses two leadership styles - transformational and transactional. Transformational leaders are those who broaden and elevate the interests of their followers and generate awareness and acceptance of the purposes and the mission of the organisation: additionally, they encourage their followers to look beyond their own self-interest for the good of the organisation (Bass, 2008). Transformational leaders are described as visionary leaders. They create high levels of trust and behave as role models. Furthermore, they show consideration for followers, delegate responsibilities, and empower them. According to Bass (2008), transformational leadership causes the leader to move followers beyond immediate self-interests through four different behaviours. He claimed that transformational leadership has different behaviours which fall along four dimensions: charisma (or idealized

influence), inspirational motivation, intellectual stimulation, and individualized consideration.

In contrast, transactional behaviour occurs when leaders motivate followers by appealing to their self-interest through an exchange of benefits. A leader can be described as transactional leader if followers are rewarded for meeting agreements or punished for failing to achieve their goal (Bass, 2008). Transactional leaders enter into relationships with followers on the basis of mutual benefits (Yukl, 2010). Transactional behaviour can be considered to involve three features; 'contingent reward', 'management by exception', and 'laissez-fair leadership' (Yukl, 2010; Avolio, 2011). This latter feature is dismissed by some writers as 'non-leadership' because it is characterised by a leader who shows passive indifference to the task and to the followers. Moreover, this style has been excluded from transactional style dimensions in many leadership studies (Alomiri, 2015).

Numerous studies confirm that transformational and transactional leadership have positive impacts in various ways: on commitment (Pitman, 1993), motivation (Masi, 1994), project quality and innovation (Keller, 1992), organisational commitment (Walumbwa *et al*, 2004), effectiveness (Lowe *et al*, 1996), and they are positively related to innovative behaviour (Pieterse & Knippenberg, 2010).

A major study by Alomiri (2015) suggested that leadership can create specific types of organisational culture that support e-services implementation. His work

examined five organisations in Saudi Arabia, two of which were universities under investigation in this study. He concluded that leadership styles have a positive impact on e-services implementation and organisational culture within Saudi organisations. Moreover, e-services implementation increases when the mean for leadership styles rise. Therefore, leadership is a factor of utmost importance to organisational structure, and its role was acknowledged in the findings of his research. The three styles he selected were transformational, transactional, and servant leadership, and his analysis showed that these are commonly applied by the leaders in the five organisations. It must be noted, however, that the level of adoption of these styles varied between organisations. According to the results, the leaders in two organisations had the highest means for all styles of leadership - transformational, transactional, and servant. Furthermore, these two organisations received the highest ratings for e-services implementation, thus confirming the role of leadership as a source of influence and authority within these universities. Consequently, the transformational, transactional, and servant styles had direct and positive impacts on e-services implementation. Furthermore, leaders who employ hybrids of these styles could achieve better outcomes.

Alomiri (2015) also recorded a negative relationship between national culture and leadership styles, which means that the two national culture dimensions that have been used in his study (uncertainty avoidance and power distance) negatively influence the behaviour of leaders and subordinates.

The influence of leaders and the principles of leadership apply to all organisations including educational institutions (Cordeiro, 2010). Educational leaders can profoundly shape the quality and level of educational courses and standards, and they can help elevate teaching methods and enhance the experiences of students (Bo, 2013). A number of studies have investigated the styles of leadership that have enabled universities to better achieve their goals and objectives. For example, Glaser and Smalley (1995) found that the most influential leadership characteristics demonstrated by educational leaders included positive attitudes, sound knowledge of educational management, a sense of direction, consistency, flexibility and adaptability, open-mindedness, trustworthiness and reliability, firmness and decisiveness, strength and confidence, visibility and accessibility, and the ability to motivate. According to Gmelch and Miskin (1993), there are three challenges which face departmental heads in universities. The first is to develop an understanding of, and clarity about, the motives and roles of a department head. The second is to recognize the strategic planning process for creating a productive department, a task which requires a clear vision and the capacity to formulate a departmental mission statement that describes the long-term intent and the priorities for endeavours and for the decision-making processes. The third challenge is to develop the skills which make up effective leadership. Nwafor (2012) investigated the essential leadership styles of principal officers of public universities in Nigeria. He found that there was a significant difference in their choice of directive and bureaucratic leadership styles. However, these two styles can be described, to some extent, as the difference between leadership and

management. Directive leadership implies interaction between the leader and the led in one direction, this being an approach whereby the leader guides and governs his/her followers. Directive leaders play the central and active role in taking decisions and supervising subordinates. According to Bass (2008), the directive leader takes decisions alone and without explanation, discussion, persuasion, and without informing his followers until they are instructed to carry out his/her requirements. In contrast, bureaucratic leaders devote great attention to detail and help to bring control and clarity to situations. This style of leadership is very similar to management as it focuses on the control and performance of work rather than considering people and their needs.

Nwafor (2012) found that the most common approach of the principal officers of Nigerian universities is the bureaucratic style which does not seek results nor the establishment of sound relationships. Instead, the goals of such a leader are to stay clear of trouble by avoiding risk and to meet only minimum requirements for both results and relationships.

Elkordy (2013) examined leadership styles in research universities in the US, concluding that the 'servant' style was the approach that was most productive for supporting faculty and for achieving research goals. This was so because the servant style comprises several important elements: it provides a model for others to follow; it inspires with a shared vision; it challenges the existing process it delegate to others; and it fosters emotional involvement. Furthermore, Grant

(2013) claimed that the servant style, when combined with a focus on outcomes, can lead to remarkable success.

Wirbaa and Shmailan (2015) studied the leadership styles of managers in universities in the Eastern Province and Middle Province of Saudi Arabia. They also examined the main leadership styles being used in Saudi Arabian universities and the effects of experience on leadership. In their project they requested that participants rate themselves according to the dimensions of transformational and transactional styles. Transformational leadership style includes four items: help others to develop their strengths; considered the moral and ethical consequences of their decisions; talk optimistically about the future; re-examine critical assumptions to question whether they are appropriate. The transactional style can be represented by several items: make clear to staff what they can expect when performance goals are attained; keeping track of staff errors; avoiding making decisions; and waiting for things to go wrong before taking action. The researchers found that the respondents generally rated themselves highest according to the qualities of transformational leadership. The highest mean was when managers rated themselves with 45.65% for the dimension of 'helping others developed their strengths'. The researchers concluded that most managers in academic institutions in the Eastern Province and in the Middle Province are 'transformational' leaders while few can be categorised as 'transactional' leaders. However, their study did not answer the question of which was what is the most common form of leadership nationally among managers in Saudi universities, and

neither did it ascertain the influence on leadership of the managers' years of experience.

Knight and Hoken (1985) studied the relationship between leadership styles and performance of departmental heads in universities in the United States, noting that there are two broad categories of leadership behaviour; people-oriented (consideration) and task-oriented (initiating structure). In their enquiry, they sought to identify whether leadership abilities and behaviours translate into perceived effectiveness of departmental heads. Their study found that there was a positive relationship between leadership abilities and behaviours and the effectiveness of departmental heads. Significantly, they found that the most effective departmental heads were those who rated high in both consideration and initiating structure. Additionally, a high rating on either one of the traits was strongly associated with high performance ratings.

Universities in this millennium face a number of challenges: attracting and retaining top quality faculty, staff, and students; implementing learning technologies; meeting increasing demands from the public, students and university employees; and seeking new and alternate sources of funds and financial models (Bransford & Brown, 2000). Therefore, these challenges require leaders who thrive on change, who foster environments of innovation, who encourage embracing new learning technologies, and who can lead universities successfully into a bright future.

4.3 Female leadership

Although Arabian history since the 14th century contains various instances of female leaders, in Western societies leadership has, until relatively recently, been regarded in masculine terms (Gedney, 1999). This was particularly noticeable in literature which emphasised the 'Great Man' and the 'Traits' theories of leadership. These concerns themselves with the qualities that contribute to individual greatness among national, military, political, and organisational figures – and they also stress the perceived differences between male and female leaders. Traditionally, the concept of leadership has been associated with masculine characteristics such as power, strength, domination, and assertiveness (Alomiri, 2015; Koenig *et al.*, 2011; Gedney, 1999). Although there is no evidence that such characteristics are associated with true leadership, it appears that socially and culturally that is how they have been seen.

Cummings (2005) surveyed women executives to identify the key features of effective female leaders, and in response he compiled the following list: they can multi-task, are emotional, strong, intuitive, compassionate, relationship-oriented, consensus-based, collaborative, and communicative. The same group provided a different list of adjectives to describe the effective male leader, the main characteristics were: strong, intelligent, powerful, dominant, assertive, focused, stubborn, and single-tasking.

These descriptors indicate that the participants regard female leaders as being, by their nature, very different from males. Many women consider that they are incapable of working within conflict situations. Consequently, scholars and practitioners usually associate leadership with masculine traits and characteristics regardless of the leader's nature, whether that leader is a man or a woman. Further, successful women leaders tend to have some very masculine traits. For example, Margaret Thatcher, the Prime Minister of Great Britain, is often considered to exemplify some male leadership traits and is viewed as having been self-assured, iron-willed, resolute, and bearing great determination, all of which are traditionally considered to be masculine characteristics.

Culture has a profound influence on perspectives of leadership. It affects how women are prepared as leaders, and typically embraces masculine traits. Therefore, those who explain leadership in terms of traits may consider that anyone could become a leader if he/she has specific masculine characteristics, regardless of their gender.

According to many studies (e.g. Mintzberg, (1980); Helgesen, (1995); Cummings, (2005), women tend to be more relationship-oriented, while men are more task-oriented. Therefore, a 'masculine style' tends to be more assertive and directive, with task-based behaviours, whereas a 'feminine style' tends to be interpersonal and democratic, with people-based behaviours. According to Al Suwaidan and Bashraheel (2003), female leadership tends to be characterised by the following:

1. Working with the same effort but taking short and divergent rests.
2. Being interpersonally oriented.
3. Being democratic.
4. Believing that visits and disturbances provide a good chance to understand subordinates' needs.
5. Allocating enough time to family.
6. Building a relationship with people outside the organisation.
7. Assessing every piece of work and considering the future effects on families, environment and education.
8. Linking with her work but also linking with other things.
9. Liking information exchange.
10. Not liking working through organisational hierarchies; preferring instead to work through relationship networks.
11. Being more efficient in problem-solving situations.
12. Emphasizing the process.

Al Suwaidan and Bashraheel (2003) claimed that although men and women share some common characteristics, there are many differences which are summarised in the following table.

Table 4. 1: Common characteristics of men and women

Men's Common characteristics	Women's characteristics (strengths)	Women's characteristics (weaknesses)
Adaptable Polite Loyal (faithful) Committed Creative Enthusiastic Competent Effective Systematic	Tender Understanding (Appreciation) Passionate Sensitive Compassionate (merciful)	Compliant Reliant upon others Temperamental

Source: Al Suwaidan & Bashraheel (2003)

The dominant leadership style consists of masculine elements, and despite its shortcomings it has long been accepted as the main form of organisational control in many societies. Therefore, an easy way for women to lead is to adopt masculine organisational methods – though it is evident that more women are moving into senior positions and asserting their own styles. According to some researchers (e.g. Porat, 1991; Grole & Montgomery, 1999; Cummings, 2005), female attributes of nurturing, sensitivity, empathy, compassion, caring, and cooperation are associated with effective administration. Furthermore, other researchers, such as Helgesen, (1990) and Rosener, (1990), claim that female leaders, as compared with male leaders, are less hierarchical, more cooperative and collaborative, and more oriented to enhancing others' self-worth; such behaviours, they say, make women excellent leaders. Indeed, as recent developments have demonstrated, women can be creative and innovative in particular organisations that need such

characteristics (e.g. in the fields of education and health). Desvaux and Devillard (2008) claimed that most leadership behaviours that enhance corporate performance tended to be utilised by women more than by men in regard to team management. In their study they measured a company's organisational competence in terms of nine key criteria: team leadership; direction; work environment and values; accountability; coordination and control; capabilities; motivation; innovation; and external orientation.

The researchers then determined how these dimensions of organisational performance could be affected by leadership behaviours. Basing their study on the work of Bass and Avolio (1990), as cited in Desvaux and Devillard (2008: 4) they examined the following characteristics: participative decision-making; role modelling; inspiration; expectations and rewards; people development; intellectual stimulation; efficiency of communication; individualistic decision-making; control; and corrective action. In exploring how women contribute to organisational performance, Desvaux and Devillard (2008) explored these nine leadership behaviours, citing Eagly's (2003) findings that women commonly applied five leadership behaviours: people development; expectation and rewards; role model; inspiration; and participative decision-making.

They concluded that these latter five dimensions assist in strengthening the work environment and values, accountability and leadership, and team organisational performance dimensions. Therefore, those who believe that leadership is down to

skill and who place emphasis on the process of the work rather than its products consider women to be well qualified as leaders. Furthermore, it is considered that if potential leaders learn these skills and processes well, they can contribute significantly to overall organisational performance.

4.3.1 Empowerment of Saudi women

Although, from an Arab cultural perspective, Saudi women are encouraged to remain at home to serve their children and husbands, this does not mean Islam or Saudi culture forbids women from working - as long as it is controlled by traditional Sharia law. According to Al-sheha (2000), Islamic law does not prohibit women from the right to work. Rather it permits women to conduct their own businesses and financial issues. However, these businesses must not conflict with her main responsibilities and duties at home (ibid). Furthermore, her work must be in a female environment involving no physical contact with men.

Arab history is strewn with examples of women leaders and according to Ghadanfar (2001):

'Muslim women's achievements and influence are found in every sphere of momentous periods in the history of the world. ...They were in politics, were as courageous in war as in the peaceful and persuasive propagation of the teachings of Islam. ...They were to be found in the political arena, in the field of education, in the courts of Islamic jurisprudence, in the interpretation of Sharia, in trade and commerce, in agriculture, in medicine and in nursing. In short there was no sphere that did not benefit from their intellect, their wisdom and their gentle yet firm strength of character'. (95)

Since the appointment of King Abdullah in 1995 the roles and status of females have been a prominent issue, and changes have been implemented. The King had the strategy and vision to promote women's rights, thus in 1999, for the first time in Saudi history the government permitted twenty women to attend the National Consultative Council. A modest gesture, nevertheless, it was an initiative that paved the way for women to progress further into the public sphere. This event was soon followed by five other changes (Al-Dabbagh, 2009): King Abdullah's "National Dialogue" in 2003; the municipal elections in 2003; the Chamber of Commerce elections in 2004; the establishment of the first women's university in Saudi Arabia (the largest female-only university in the world - Princess Nora University) in 2007, and the appointment of a woman as an Assistant Undersecretary for the Ministry of Education in 2009. Although these do not represent comprehensive reform, nor what women sought, nevertheless they demonstrate how Saudi society can accustom itself – albeit slowly - to seeing women in leadership positions.

- The National Dialogue in 2003

A conference held in 2003 under Abdullah's auspices grouped the religious leaders of different confessional groups. One of the main sessions of the conference discussed 'women rights and duties'. The aim of the session was to expand the role of women in public life.

- Municipal Elections

In 2003 the elections, which included half the seats of the nation's municipal councils, were announced. It was the first time that the Saudi government had introduced the word 'election' into their governmental vocabulary. Some commentators considered it to be an historic moment in the nation's political culture. The announcement stated that women were not eligible to participate, but eight years later, in 2011, this ban was reversed, the government then announcing that it would allow female citizens to vote and to run for office in the municipal elections, starting in 2015 (Al-Sulami, 2008).

- Chamber of Commerce Elections

In 2004, one year after the original announcement about the municipal elections, the Saudi government allowed women to participate in broad elections for the Chambers of Commerce and Industry. Two women were elected in the Western province and Jeddah though no women won positions in other regions. Regardless of this failure to win, it was a ground-breaking opportunity for women to participate in an electoral process.

- Princess Nora bint Abdurrahman University

Women's education made far-reaching progress during the era of King Abdullah, providing further evidence of the empowerment of women in the state. Princess Nora University is the largest female-only university in the world, with twelve

colleges serving 50,289 students in the bachelor programme, 371 in the doctorate and 432 in the masters.

- Appointment of a woman as Assistant Undersecretary in the Ministry of Education

In 2009 the government announced the appointment of the first woman to the Ministry of Education as the Deputy Education Minister for Girls' Affairs. It was a milestone in Saudi political affairs, many Saudis being heartened by this promotion. A female educator, quoted in the telegraph, "This is a successful step. We've always suffered from having a man occupy the position. A woman knows what problems and challenges her peers face. It's a change for the better". This summed up the general reaction to this breakthrough.

These reforms have offered women unprecedented opportunities, and they represent the first of several changes as part of a social and cultural renaissance in the Kingdom. Furthermore, they demonstrate how these nascent government initiatives can play a significant role in empowering women within the Saudi environment. They are evidence of a major shift in the nation's economic and political life.

4.3.2 Incentives for women's work and leadership in the Saudi environment

These and other such changes are not only evidence of social transformation, at a practical level they are opening-up opportunities for women to move into senior leadership posts. Following is an outline of some recent developments.

- Appointment of the first woman to a senior government position. In 2009 a woman was selected for the post of Deputy Minister for Girls' Affairs in the Ministry of Education.
- Although the right to education was granted to Saudi women as late as 1970, dramatic advances in education have been achieved over the last decade or so. Women's participation in higher education equalled men's in 2003 (Kingdom of Saudi Arabia, 2003), then by 2007 more women than men were enrolled in tertiary courses. According to the Central Department of Statistics and Information in the KSA (2012), male university graduates numbered 44,767 (43%) whereas there were 59,022 (57%) graduating females.
- The expansion of the roles of women in public life and discussion of women's rights and duties were openly debated in the National Dialogue in 2003.
- In 2002 came the establishment of the Businesswomen's Committee, this being supported by Princess Adelah bint Abdullah bin Abdul Aziz; in 2005 this became the National Centre for Businesswomen. The Centre provides training in a broad range of areas including: public relations; computer skills; management of social services; management of voluntary associations; banking skills and capabilities (Metcalf, 2009).
- Women were elected to municipal councils for the first time in 2015.

- Establishment of the King Abdullah University of Science and Technology with mixed genders, allowing women to enter all professions (2009).
- Establishment in 2007 of the world's largest female-only university;
- The Saudi government allowed women to participate in elections for the Chambers of Commerce and Industry (2004), an institution which supported the development of businesswomen and professional women
- The Chambers of Commerce and Industry subsequently called for the following reforms:
 - A human-resource development fund to provide special training for women, and the employment of women in training programmes;
 - Permission for women to work in stores selling women's goods;
 - A request for the Ministry of Labour to collaborate with the Ministry of Public Services and Social Affairs and the Ministry of Economy and Planning to establish an integrated plan for Saudi women workers and to identify the real needs of women workers;
 - The Ministry of Labour, Ministry of Trade and Industry, and Council Offices to investigate provisions for maternity leave with a view to providing further benefits which do not prevent their employment.

Recently, King Salman has ordered a review of laws that may preclude women from working, travelling alone, undergoing medical procedures, and from attending university without the permission of a male relative or spouse (Alkhalisi, 2017). There are also signs of progress towards increasing the participation of women in

the workforce - a key 'Vision 2030' goal - particularly in the fields of finance *and technology*. The female labour force participation rate (over the age of 15) reached 22 % in 2017, a rise from 14 % in 1990 (ILO, 2017).

The current regime under King Salman has witnessed marked progress in empowering women politically. More Saudi women are being selected for leadership roles, an example being the appointment of a Vice President for Women's Affairs at the General Sports Authority – a move which paved the way for women's participation in sports-for-health, sporting competitions, and professional opportunities (Alsubaie & Jones (2017)). In 2017, *three senior positions* in finance, including the CEO of the stock exchange, were filled by women. Citigroup has also appointed a *woman to head the bank's operations* in the kingdom. Furthermore, Saudi Arabia's military has sought applications from women for the first time, marking a major step towards improving women's rights and opportunities in the state. Saudi women have been granted the right to drive and to attend soccer matches, and very recently, in 2018, a woman was appointed as Deputy Labour Minister (Arab News, 2018). Increasing the number of Saudi women in the workforce is part of the Crown Prince Mohammed Bin Salman's proposed reforms for *Vision 2030* – the objective being to raise women's participation in the workforce from 22% to 30%. According to the Global Gender Gap Report (2017), Saudi Arabia achieved the region's largest improvement in gender gap closure over the past decade, and is the fifth-most improved country globally in educational attainment (Alsubaie & Jones (2017)). Interestingly,

according to Alsubaie & Jones (2017) Saudi women now constitute 60 % of university graduates. Today, 60 % of Saudi women use the internet and 61% hold an account at a financial institution.

This brief overview of the literature shows the importance of women moving into leadership, and as noted this can have a major effect on organisational features such as overall performance, outcomes, job satisfaction, product development, organisational commitment, responsiveness, and readiness. Furthermore, leadership styles appropriate for university management are not noticeably different from those in any organisations. Therefore, the successful implementation of new learning style such as AL in universities in Saudi Arabia, and elsewhere, requires substantial support from academic leaders. Different styles of leadership are described in the literature, and the labels most commonly used to categorise leaders' behaviour include "transactional", "transformational", "participative", "democratic", "visionary", and "autocratic". These labels are broad and do not measure quality of leadership, however, they describe the different approaches to achieving the same essential objectives critical to any organisation's efficiency: that is, they seek to help organisations to establish their strategies and directions and influence members to achieve their objective (Leithwood *et al*, 2004).

Faculty members in Saudi tertiary education have been remarkably successful in furthering the empowerment of women in the country. Changes have been most notable in regard to political, social, and civil rights, with political participation being

especially important. In the last few years Saudi women have proven that they are qualified to hold leading positions, and becoming fully involved in Shoura has helped them to gain more social, political and civil rights (*Arab News*, 2015). Furthermore, fifteen female Saudi CEOs who broke new grounds in the fields of social advancement, education, economics, politics, and culture have been named in the list of the world's 100 most powerful Arab women, published by CEO Middle East (2013). The highest Saudi entry was second-place Lubna Olayan, while Princess Ameerah Al-Taweel and Mona Al-Munajjed ranked third and ninth, respectively.

4.4 Saudi National Culture

Over the past 50 years or so the literature on Saudi culture has been studied intensively by researchers. The importance of culture in this research has been identified as a vital element to AL implementation. The word 'culture' refers to the traditions and practices, the arts, social institutions, and accomplishments of a specific nation, or even a particular social group (Gupta, 2011). Schein (2010) suggests that culture implies stability and rigidity in the way we are supposed to perceive, think, feel, and act in our social life or occupation. Hofstede maintains that culture is not innate but rather it is something that can be taught or imposed (Alomiri, 2015). According to Hofstede and others culture is unwritten rules and can be defined as *"the collective programming of the mind that distinguishes the members of one group or category of people from others"* (Hofstede 2010: 6). Regardless of their particular discipline, academics have generally adopted

definitions of culture which are similar to that of House *et al* (2004, p 15) who conceptualized it as “shared motives, values, beliefs, identities, and interpretations or meanings of significant events that result from common experiences of members of collectives that are transmitted across generations”.

The twenty-first century way of life has been welcomed in Saudi culture. With the modern world has come a profound technological revolution that has been embraced by the majority Saudis, and the rapid development of the country has led to one-third of the population being comprised of foreigners (QNB capital 2012); but despite these forces of change Saudis remain proud of their Islamic and Bedouin culture. It is still characterized as being a masculine, uncertainty-avoiding, power-distance culture, yet many issues might further reshape the nation in the next few years (Alomiri, 2015). According to the website of the Ministry of Higher Education, more than 150,000 students were studying abroad at the end of 2014, and those students are bound to bring back to KSA the values, attitudes, and standards of the countries where they worked. The Saudi populace is youthful, 64 % being below the age of 30, and 12 % aged between 13 and 17 (QNB capital 2012). This high proportion of young people is being shaped more by the media than by their parents (Alomiri, 2015). According to Murphy (2013), Saudi youth is ranked first among Arabic countries for following and using social media such as Twitter and Facebook. Furthermore, the new windows to the world (such as YouTube, Instagram, Twitter, and Facebook) give the new generation new social and cultural perspectives so that they are more inclined than their parents to accept

or reject what they are being taught. Consequently, no one can accurately predict what Saudi culture will be like in the decades ahead - however, far-reaching change is inevitable. This high percentage of under-18s is technology-oriented and will thus be both skilled and motivated to adopt technological solutions (Alomiri, 2015).

Culture influences all aspects of Saudi life, including education. In addition, there are strong links between culture and learning that are reflected in how people prefer to learn and how they tend to process information (Samovar *et al*, 2009, p. 338). There have been comparatively few studies analysing learning styles across cultures (Sywelem *et al*, 2012; Romanelli *et al*, 2009; De Vita, 2001), but they indicate that culture affects environmental perceptions which, in turn, influence the ways by which information is processed and organised. Furthermore, culture plays a role in conditioning and strengthening learning styles and partly explains why teaching approaches used in specific parts of the world may be more effective or less effective when transplanted to another locale (Joy & Kolb, 2009). Lecturers should be aware of this phenomenon and the impact it has on the diversity of learning styles that are present in classrooms and lecture halls.

People from different nations carry the cultural perceptions and beliefs of that nation and ascribe different meanings to the same situation (Gupta, 2011). Thus, an understanding of the cultural values of different nations can help explain why people behave differently in a same situation.

According to Avolio & Bass (1999) and Schein (2010), leadership and culture are interconnected concepts and furthermore, they found that culture affects leadership styles. Also, culture exerts an influence on the behaviour of leaders who must conform and operate within the strictures of their economic environment. In the business world, the behaviour of leaders is circumscribed by the culture of the country and/or the social group from where they have emanated (Gupta, 2011). Thus, in this sense, culture shapes leaders' actions and styles (Schein, 1992). Indeed, the relationships between leaders and followers can be explained largely by their national cultural values and norms. For instance, employees in some countries are familiar with leaders who listen to the follower's opinions, but conversely in other settings followers may be inhibited from challenging or questioning their leader (Hofstede & Hofstede, 2005).

In Arab tradition, the leader of a people is their servant. This means that the leader serves those whom he or she leads, both as a group and also as a set of individuals (Adair, 2010). Furthermore, servant-leader means to be servant first; that is the perception that one wants to serve, but this develops into a conscious aspiration to lead. The servant-leader focuses on others rather than himself/herself and on understanding his role as a servant (Greenleaf (1991). This form of leadership is widely accepted in Saudi culture and preferred by employees while also being acknowledged by Saudi leaders (Alomiri, 2015). Furthermore, servant leadership is preferred by most Arab countries because the culture is focused on the 'hereafter' in preference to the 'here and now' (*ibid*). This is an example of how Saudi culture

can shape leadership styles. However, further investigation is needed to better understand how Saudi culture has evolved over the last two decades or so, and if the changes have influenced methods of management and leadership. For instance, it would be useful to know whether Islamic values and beliefs are as strong and if they are affecting approaches to leadership. Similarly, how far new social networks and media are altering the lives and attitudes of young people.

Hofstede and Hofstede (2005) note that notions of culture are complicated by national boundaries, traditions, language, and aspects of race. A culture may traverse several nations and ethnic groups, and it can be rather different from 'society' (Hasan & Dista, 1999). To avoid these complications, in this research Saudi cultural influences on tertiary teaching methods focus on only two of the dimensions listed by Hofstede and Hofstede (2005). These are Power Distance and Uncertainty Avoidance (as explained in chapter one). The reason for concentrating on these dimensions is that, as explained, these have the greatest impact on the whether or not universities and teachers adopt active learning.

4.4.1 Women in Saudi Culture

The segregation of the sexes, and the participation of females in the nation's social, political, and economic affairs are topics of especial interest both in Saudi Arabia and in Western media. Some Westerners, according to Morris *et al*, (2009: p.93), perceive that Saudi women exist behind imprisoning walls, cloaked and excluded from the benefits of the free life enjoyed by Western women. A common

representation is that in Saudi Arabia females are denied not only their beauty but also equality and free speech because of the traditional male hierarchy (Morris *et al*, 2008). Western commentators take a superficial look at Saudi women's lives - their veils, the restraints placed on their mobility, and their lack of equal suffrage, but in so doing they fail to consider other important factors. Smith (1987), a Western feminist writer, claimed that the traditional absence of women from Saudi Arabian public affairs is at the root of their unequal status. As Doumato states, "Girls have been taught well in Saudi Arabia to follow a specific role, a role in which they were subordinate to men, but not enough to challenge it" (2000, p.93). However, these allegations reflect the lack of understanding of both Islamic traditions and Arab culture. In fact, in many respects Saudi culture is either unknown to the Western media or they simply do not recognise it for what it is nor try to understand it. Western media (and some Western visitors) judge Saudi women's lifestyle according to their own cultural criteria and standards, and so from their viewpoint Saudi women may not claim to be women if they fail to acknowledge the standards of their own traditions. They are considered to be devoid of femininity in the absence of conduct comparable to those in Western societies (Al-Tahlawi, 2008). This reflects a substandard pattern of thought and a meagre level of understanding (Al-Bishr, 2008). Further, with such biased patterns of judgement they effectively ignore Arab cultural values and beliefs and want others to emulate their own patterns. Consequently, the dominant point of concern about Saudi women and their veiled existence has been a controversial topic for political institutions and human rights organisations in Western countries.

However, these parties have seemed not to have probed deeply into the issue to ask themselves simple questions such as 'What is the historical background and the cultural values behind Saudi women and the wearing of a veil?' Wearing a veil is widely considered to be a surface manifestation of Saudi culture. Although the reasons behind it can be easily understood, it appears to be very difficult to grasp by outsiders. Moreover, (some) Westerners and the Western media judge Saudi women according to Western standards, emphasising the negative side of Saudi culture but failing to acknowledge the benefits that Saudi women enjoy socially, economically, and in many other aspects of their lives.

In fact, Saudi women have contributed significantly to the revitalization and prosperity experienced by the Kingdom in recent decades. Today, many Saudi women hold important posts as academicians, physicians, administrators, and businesswomen (Wagemakers *et al*, 2012). At both national and international levels their influence is felt, just as it is felt in the field of healthcare and in the media. They are often counted amongst the finest minds in the banking and business sectors. They also enter the newspaper arena as journalists, correspondents and writers (Al-Dabbagh, 2009). So too, many are novelists and poets.

The Saudi government has in recent times extended various rights to women; freedom to receive an education, to employment, to welfare, to personal privacy and security, to own property and to independent medical support. Notably, Article

30 stipulated that the state would guarantee education to all, and that illiteracy would be challenged for all citizens regardless of gender. Moreover, women have the right to incomes which are comparable to men's, and they may benefit from equivalent retirement prerogatives. Interestingly, in the US, according to Al-Suwaidan *et al.* (2003) and Metcalfe (2008), women receive 71% of men's salary despite having the same qualifications and competencies.

To summarize, in its national regulations and policies the Saudi state asserts equality between women and men in all aspects of their lives, and the culture deals with women and men on an equal basis. Consequently, if there appears inequality between women and men in Saudi Arabia, it might be considered as individual cases which could be a result of level of education, maturity and perception of what the relationship between men and women should be.

4.5 Resistance to Change

Individuals have a strong predilection for stability, whilst change means moving to uncertainty and the unfamiliar. Individuals typically want to stay in their 'comfort zone' and change typically brings them to another zone (Aguirre *et al.*, 2013). Knowles and Linn (2008) gave a clear description of resistance as a reaction against change, which is evident in the existence of pressure, influence, and the stimulus aspect of change. It lies behind the affective and knowledge reactions that impact people, particularly when they become aware that they are at the centre of events and so try to adapt to change. It is a normal reaction to the threat of change,

most individuals worrying about the consequence of change and exploring all possible aspects, both positive and negative, that may stem from change (Knowles & Linn, 2008). Individuals typically resist change because they fear the unknown and are comforted by the familiar, and frequently success is tagged to the past and the present - not to an uncertain future (Paton & McCalman, 2000).

Paton and McCalman (2000) identified a number of reasons people fear and resist changes to an organisation: a) change can lead to a redesigning of the organisation, or part of it; b) change may come into conflict with old notions which represent stability, continuity, and security; c) change may promote controversy, which is very healthy when well-managed, but otherwise it can be a threat to the stability of the group and the organisation. King and Anderson (1995) listed some similar motives for resistance to change: individuals may feel a loss of control over events; individual accomplishments may be lost and there may be a need for individuals to reclaim their place; previous negative experiences of change might lead to resistance; a lack of trust; misunderstanding of the intention of change; and narrow self-interest. Lastly, at a group level, resistance might stem from existing social mores, from group coherence, and from 'groupthink'. Also, change typically brings with it more workload, which is a normal cause of resistance (King & Anderson, 1995).

The attitudes of lecturers towards change and their willingness to become active partners is considered to be a critical success factor in universities (Avidov-Ungar,

2011; Coffman, 2009; Day & Gu, 2007). Similarly, resistance to change is one of the main reasons behind failure of processes that involve change in organisations, particularly those related to the educational systems (Avidov-Ungar & Eshet-Alkakay, 2011).

Alebaikan (2010) studied the perceptions of blended learning in Saudi universities. The objective of her study was to identify Saudi female undergraduate students' and lecturers' perceptions of the advantages, challenges, and future of blended learning. She concluded that blended learning has the potential to offer a successful learning experience; additionally, female students who were surveyed reported that a blended-learning environment offered them the flexibility to continue their higher education while maintaining their own cultural values and traditions. Their work also highlighted that there are always challenges of adaptation when a new approach is employed. One of the main reasons behind lecturers' resistance to change to a new style of learning, according to Alebaikan (2010), was that they had not contributed to the decision to adopt a new learning style. Lack of consultation can breed hostility and thus a top-down decision might not be an ideal process for introducing a new style of learning within the universities. Managing resistance to change is extremely important and the manager of change should first analyse resistance factors and their causes (Hughes, 2006). Hughes adds that change-management also requires support, good communication, involvement of participants in decisions about change, and negotiations about potential strategies to overcome resistance. According to Sparkes (1991),

understanding lecturers' viewpoints regarding the change process relies on lecturers evaluating the proposed change and how far they recognise the benefits that their learners may gain. Samovar, Porter and McDaniel (2009) claimed that there is a strong link between culture and learning style that is reflected in how people prefer to learn and how they tend to process information. As we have seen in chapter one, uncertainty avoidance among people in KSA is the second highest Hofstede dimension, showing that Saudis prefer to avoid uncertainty, a situation which may express itself, according to Hofstede (1997), as overwrought anxiety and an agitated repulsion of unpredictability. The innovation and creativity of these cultures may be restricted, which may in turn affect the attitudes of lecturers and students alike. Such cultures reflect the lack of willingness to invite change, the absence of a drive to experiment, to take gambles, or to embrace new concepts. Therefore, adoption of a new learning style, such as active learning, is threatened by a high score of uncertainty avoidance for Saudi culture.

4.6 Technology

Technology is changing all aspects of education. Education is now global and not confined to formal classroom settings and textbooks; it can be conducted anywhere, in many forms, and with an ever-widening array of internet-based techniques. Digital communication tools are now being adapted to meet the demands of learners, governments, and industry. As McLoughlin & Lee (2010) explains, digital-age learners want an AL experience that is social, participatory, and supported by rich media. Furthermore, recent research indicates an increasing

need to support and encourage learner control over the learning process (Dron, 2007). Web-based multimedia productions and distribution tools (such as wikis, blogs, Twitter, Facebook, YouTube) are providing tertiary institutions with broad opportunities to incorporate social media and technologies into teaching, learning, and evaluation. If employed in combination with adequate strategies, educational technologies are able to support and encourage informal conversation, collaborative dialogue, content generation, and the exchange of knowledge, thus opening up access to a wide range of representations and notions. Several social software tools are facilitating autonomy of learners and engagement in global societies while also enabling greater student-controlled exchanges of information and knowledge (Lee, McLoughlin & Chan, 2008; Ashton & Newman, 2006).

Furthermore, the use of technology in teaching is a means of promoting learner's involvement in face-to-face time, and it can be a way of overcoming the anonymity and remoteness of large lecture halls. Supporting this opinion, Prensky (2005) explains that one aspect of higher education has been the lack of engagement and stimulus in traditional learning, but web-based media and social media can provide personal contact – albeit by way of computers and smart phones. Prensky (2005) illustrates today's learners by saying, “They are native speakers of technology, fluent in the digital language of computers, video games, and the internet” (p. 8). He also insists on the future use of more technologies in teaching and gives an example of how presenting algebra instructions in a game format could help learners to learn more rapidly and efficiently. Imitations, videos, and PowerPoint

presentations are other instances of using technologies. However, focusing on technology can create a passive learning process. In contrast, the philosophy underpinning AL is to facilitate students doing meaningful learning activities and to enable them to think about what they are doing.

The infrastructure for these tools has been given added attention in Saudi universities. For instance, King Saud University has developed one thousand 'smart lecture halls'. These 'smart halls' contain an array of educational aids such as interactive/smart boards, projectors, and e-podiums. An e-podium is an electronic device with specific software that allows the lecturer to control all of the hall's technical elements; for example, the microphones, and video conference services. These technologies will offer scope for a wider range of teaching methods, but they will entail specific training for the lecturers, and it will be necessary to evaluate their usefulness and efficiency.

Portable hand-held devices (smart phones and iPads) are becoming tools for innovations in learning, and Saudi students have positive perceptions of mobile technologies for learning (Al-Fahad, 2009). These devices offer the opportunity to deliver data and to enable engagement in the face-to-face learning environments regardless of the locations of the teachers and learners (Alebaikan, 2010). Digital involvement in class activities would replace paper notes and verbal involvement, and the student would no longer be a passive learner. Despite these developments it will take time for new teaching technologies to be fully accepted and embraced

as the norm in Saudi colleges. Wide research and training for both learners and lecturers will be needed. Lecturers need to pay attention to how their learners learn, and to take account of what their learners may already know (Prensky, 2005, p. 9). This study highlights the view that today's students demand innovations in instruction by way of AL strategies in class and by the use of new technologies in teaching.

Technology supports AL and enables the presentation of dynamic images, which describe relationships among complex concepts (Dori & Belcher, 2005). Many examples are cited in the literature about how technology supports new styles of learning, such as active learning. The Technology-Enabled AL (TEAL) Project and Technology Enhanced AL Studio (TEAL Studio) are two such examples.

TEAL is a teaching format that merges lectures, simulations, and hands-on desktop experiments to create a rich collaborative learning experience³. Furthermore, TEAL classes have many features: AL whereby students work during class in small groups with shared laptop computers; desktop experiments with data acquisition links to laptops; media-rich visualizations and simulations delivered via laptops and the Internet; and personal response systems that stimulate interaction between students and lecturers. According to Dori and Belcher's (2005) study, the TEAL has had a significant and strong positive effect on learning outcomes. Furthermore, they added that failure rates had decreased substantially while the

³ (<http://icampus.mit.edu/>).

learning gains, as measured by standard assessment instruments, had almost doubled.

The main responsibility of lecturers is to coach them and direct them appropriately when they come to class, because they try to use what they have read from pre-work and other sources to solve exercises. Therefore, whilst technology enables group interactions, most importantly are those interactions of students becoming tutors and instructors becoming coaches (Peberdy, 2014). Independent studies by the Centre for Research in Learning and Teaching in the University of Michigan found that students in courses using technology in AL reveal much higher levels of engagement than in courses without the technology (Centre for Digital Education, 2013). Thus, the use of technology has emerged as a key issue with regard to both improving outcomes and fostering lifelong learning.

4.7 Professional training programmes

Higher education plays an essential role in shaping the social and economic development of countries in a globally interdependent and competitive world. Ramsden (2003) stated that in knowledge-based economies governments see universities as engines for social change, economic growth, and industrial development (p.3). Consequently, the need for highly trained and skilled graduates obliges countries to implement plans to elevate the quality of teaching in higher education. Many lecturers in tertiary colleges are employed because of their academic attainments, but few have professional training (and some have little

interest) in teaching (Al-Hattami *et al.*, 2013). Subsequently, writers such as Little *et al.*, (2007) assert that academics must be good teachers too, and so there is a need in many universities for lecturing staff to be given relevant training so that teaching standards can be elevated (p.11).

Higher education must adapt to demographic changes as well as to the rising pressure of economic competition, and many advanced societies now see their futures not in manufacturing but as knowledge-based (James, 1990: Winston, 1999). Consequently, many researchers (Al-Ghamdi *et al*, 2012; Gibbs & Coffey, 2004) realise that traditional teaching practices cannot produce high-level thinkers/workers desired for the labour market. Globally, governments are now allocating more to training to strengthen the effectiveness of their teaching and learning processes (Al-Ghamdi *et al*, 2012).

While universities may seek prestige through their research, they must not neglect their role in providing quality teaching (Little *et al*, 2007). To promote the education system, in the past ten years the Saudi government has invested heavily and made strong efforts to improve the country's higher education system. According to the National Report by the Office of the Deputy Minister for Educational Affairs in 2010, the Ministry of Higher Education aimed to increase the standards of the country's higher education institutions, and one way of doing so was by strengthening the National Commission for Academic Accreditation and Assessment (NCAAA, p. 18).

The significance and efficiency of faculty training programmes to raise faculty members' professional capabilities in teaching are well documented in the literature (Hendriks *et al*, 2010). Some institutions mandate in-service training for all teaching staff while others demand certificates in teaching, and many consider that teacher-training should be a lifelong learning process (Al-Hattami *et al.*, 2013). Gibbs and Coffey (2000) proposed a framework for faculty training-programmes, but the overall objective is to develop teaching skills, improve teachers' approaches to teaching and learning, and to assess changes in students' learning. Faculty members' competency includes knowledge of their subject, teaching skills, and professional attitudes. Knowledge of a subject is not sufficient to claim competency in teaching (Gibbs *et al*, 2004): it also requires competence in other related matters such as learning theories, the psychology of learning, and even 'non-academic' knowledge of related social, administrative, and technical issues. This aspect of teaching competence was endorsed by a report advanced by Hendriks *et al*, (2010) for the Office for Official Publications of the European Union on faculty professional development. The report showed that learning strategies, learning to learn, and reflecting on these learning strategies (meta-cognition) are as important as mastering content. Moreover, the report referred to the work of Darling-Hammond *et al* (2010) who listed a number of studies confirming that teachers who have pedagogical training are more effective in their teaching than those who are competent solely in their own specialist subject.

While the Saudi National Qualifications Framework for Higher Education presented strong measures to ensure high standards of educational courses, it stopped short of identifying competency criteria for faculty members. This failure to define and prescribe faculty competency criteria was confirmed by Al-Ghamdi, *et al.*, (2012, p. 85) who insisted that, in general, faculty assessment is still unsatisfactory because there are no criteria or performance indicators.

The government of Saudi Arabia has high expectations of its universities. In its Ninth Development Plan the government pointed out that the education system was still falling short of meeting the demands of the labour market (Al-Ghamdi *et al.*, 2012). It recommended new approaches that would be responsive to the needs of the economy, and it particularly stressed the need for suitably trained young people in the disciplines of science, medicine, engineering, computer science, administration, and information technology. The Ministry has subsequently undertaken a number of important initiatives to elevate the quality and performance of higher education institutions (Al-Hattami *et al.*, 2013). One initiative was the formation of the National Commission for Academic Accreditation and Assessment (NCAAA, 2003), its goal being the development of higher education criteria and standards for academic performance and for the accreditation of academic programmes. The NCAAA has developed eleven basic quality criteria for higher education institutions, and of particular relevance to this work is professional training programme Standard 4. Standard 4 deals with features of teaching and

learning, concentrating on five areas known as 'learning consequences' (Al-Ghamdi *et al*, (2012); OER, (2013)). These are as follows;

- Knowledge: the capacity to remember, comprehend, and present information, involving knowledge of particular facts, knowledge of concepts, principles and theories, and knowledge of process.
- Cognitive skills: the capacity to apply conceptual understanding of ideas, principles, and theories, and to apply processes, including critical thinking and creative problem-solving, both when requested to do so and when encountering unexpected new circumstances.
- Interpersonal skills and responsibility: these involve the capacity of teachers to take charge of their own learning and their own on-going personal and professional development, to work efficiently in groups, to demonstrate leadership, act responsibly in personal and professional relations, and act morally and with high ethical standards in personal and public forums.
- Communication, information technology and numerical skills: these involve the capacity to communicate effectively in oral and written form, use information and communications technology, and use basic mathematical and statistical methods.
- Psychomotor skills: which are demanded in some arenas of study, for instance medicine, music, and fine art.

According to Al-Hattami *et al.*, (2013), in 2008 some external reviewers⁴ reported to the NCAAA that the educational practices of some universities in Saudi Arabia were quite weak, the reviewers identifying several areas of academic performance in urgent need of reform. They described how traditional examinations were still extensively used and that the evaluation of learning was not aligned with the objectives or the expected educational outcomes. Consequently, the report highlighted the urgent need for clearly defined learning outputs that are linked to teaching strategies and assessment methods. Furthermore, the reviewers stated that the university administration lacked a uniform system for on-going programme evaluation. Finally, a heavy emphasis on theory rather than on practical application was observed in regard to the institution's teaching and learning practices (OER, 2013). Therefore, an accreditation process would enhance the overall programme quality. Furthermore, according to NCAAA (2009, p.2), for institutions and programmes in post-secondary education to be granted accreditation "it is necessary for evidence of good quality performance to be provided in relation to all general standards and with all of the subsections of those standards".

Student learning outcomes must be clearly determined in an accreditation process and it must be evaluated and verified through suitable techniques. Furthermore, teaching staff must be trained and qualified for different styles of learning. They should be able to use a variety of teaching strategies that are suitable for different

NCAAA contracts reviewers or consultants from different parts of the world to assess Saudi universities.

types of learning outcomes. Therefore, using suitable teaching strategies and different learning styles such as AL are important factors in the evaluation of teaching staff by an accreditation team (NCAAA, 2009).

4.8 Conclusion

Saudi Arabia is a conservative society, not given to hasty change, and so the introduction of any new approach to teaching and learning will depend on the qualities and skills of educational leaders. The introduction of methods of AL must take account of many elements, and before designing and developing such programmes it is imperative for leaders of universities to have a sound understanding of the various cultural, social, economic, psychological, and pedagogical factors that can affect the ways in which lecturers and learners use AL practices. Afshari *et al* (2011) identified two main factors that affect AL practices in universities; organisational and individual factors. Indeed, these and other elements do not function alone, for as Brummelhuis (1995) has shown, the effective implementation of methods of AL is not dependent of the availability or absence of one individual factor, but is determined through a dynamic process involving many interrelated factors.

In general, most academics in the field of change consider change as a process instead of an outcome, and they emphasize the importance of effective leadership for the success of any change that might be initiated (Cheung & Wong, 2011). According to Fullan (1991), the process of change consists of three phases;

initiation (mobilization or adoption), implementation (initial use), and continuation (incorporation, routinization or institutionalisation). Additionally, he indicated that there are forces affecting each phase of the change process, although these forces do not have equal influence throughout all stages of the innovation process of AL in education. Therefore, researchers have identified the key influences at different stages of development. Based on this information, barriers to the successful use of AL can be identified, and forearmed with that knowledge educational leaders, lecturers and learners can develop solutions for overcoming those barriers. The next chapter reviews the design and implementation of the methodologies used.

Chapter 5: Methodology

5.1 Introduction

This chapter provides a detailed explanation of the research processes adopted for this study. The objectives and the research questions of the study are followed by the research methodology. The sampling procedure is described and justified, the data-gathering methods are specified, and the rationale for participant-selection is demonstrated. Lastly, the data-analysis process and the ethical considerations are discussed.

5.2 Objectives and Research Questions

This study aims to examine and understand the perceptions of Saudi undergraduate students and lecturers in regard to active learning, to identify the key factors that influence their views, and to provide recommendations for future research, strategies, and educational practices.

The main aim of this research is to answer the following questions:

- a) What are the challenges that face Saudi universities in implementing active learning?
- b) How do academics and undergraduate students in Saudi universities perceive active learning?
- c) What are the advantages and disadvantages of AL for academics and students in Saudi universities?

- d) What obstacles are encountered by academics and students who seek to apply AL methods?
- e) What are the factors that influence the adoption of AL procedures in Saudi universities?

5.3 Research Methodology

Research can be described as a methodical and critical approach to the achievement of generated knowledge (Ernest, 1994). Nevertheless, research does not take place in isolation and theoretical perspectives and concepts guide quests for new information, knowledge, and understanding. Researchers conduct their work on the basis of a set of beliefs about knowledge (theory), and this call a 'paradigm' (Kuhn, 1922). The parameters and the limits for scientific research are recognized by the paradigm, and "scientific inquiry is carried out strictly in line with it" (Crotty, 2005, p. 35). The selection of an appropriate research paradigm for this project was founded on responses to the three categories of questions (epistemological, ontological, and methodological) (Guba & Lincoln, 1994) in an attempt to understand the most important variations among paradigms. The answers to these questions, which depend on each other, led to the selection of an interpretative research pattern as the method best-suited to obtaining results to the above research questions.

According to Guba and Lincoln (1994), the epistemological question is "What is the nature of the relationship between the researcher and what can be known?"

(p. 108). Epistemologically, the researcher task was to reach out to participants, and to become immersed in their world in order to understand and make sense of their built meanings. These processes are central to this enquiry because understanding is reached and meanings are built and interpreted via the interaction between the researcher and the respondents (Radnor, 2000). As a woman living in a gender-segregated environment it was evident that I could work most effectively by personally accessing female campuses and by using closed-circuit TV to contact male participants in the male campuses. My previous experience of teaching enabled me to build sound and reliable relationships with the participants. The ontological question that helped shape this methodology is "What is the form and nature of reality and what can be known about it?" (Guba & Lincoln, 1994, p. 108). The purpose of the study was to explore the perceptions of students and lecturers regarding active learning, and it was anticipated that this would yield diverse interpretations as it is a socially constructed reality. In this study I was aware of the supposition that reality is not an objective phenomenon; nevertheless, according to Ritchie and Lewis (2003) the social world is ruled by standard expectations and common understandings, and therefore the laws that govern it are not unalterable. The response is in covenant with interpretative research that reality is socially built, where individuals' behaviours are being constantly interpreted to provide a meaningful explanation, typically within a specific context. The last identify question is "How can the researcher find out what he/she believes to be known?" (Guba & Lincoln,(1994), p.108). The methodological hypothesis is important in identifying the techniques that will be used to gather the research data.

The nature of the research questions listed above strongly indicated the use of an exploratory systematic approach which was evidently a more appropriate path for exploring and providing a detailed account of the experiences of the student and lecturer participants. Ritchie and Lewis (2003) indicated that through the exploration and understanding of the social world by respondents' viewpoints, interpretations are given on the level of meaning rather than cause. An exploratory systematic view enables researchers to detect the perceptions, cultures, and values of the participants by searching for meanings in behaviours and words (ibid).

The previously delineated philosophical hypothesis of my research is mainly subjective and qualitative in nature. Thus, the researcher can be defined as an interpreter following an interpretative pattern to understand the perceptions of the Saudi students and lecturers of an AL environment. Interpretive methods and social constructionists tend to embrace the idea that all social reality is built or established by social interaction (Esterberg, 2002). Ernest (1994) indicated that the interpretative paradigm is recognized through its wide diversity of names involving constructivist, naturalistic, and qualitative approaches to educational research. However, there is a distinct difference between a whole approach, a paradigm, and a methodology. It is well known that qualitative research is not always situated within, or aware of, the interpretive paradigm. Nevertheless, in this study use will be made of the two terms 'qualitative research' and 'interpretative paradigm' alternately in order to conform with author' selections in their use of

these two terms.

The interpretative research paradigm may be generally defined as research undertaken in a natural environment where words or pictures are collected and analysed by induction in an effort to interpret the point of view of the participants. Interpretive research “is trying to come to an understanding of the world of the research participants and what that world means to them” (Radnor, 2002, p. 29). According to Cohen *et al.*, (2007), interpretivist researchers study individuals with their numerous different human behaviours, attitudes, and opinions. Pring (2000) states qualitative research addresses the ‘meanings’ by which individual and social reality are understood (p. 45) Creswell (1998) describes qualitative research as:

“An inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem. The researcher builds a complex, holistic picture, analyses words, reports detailed views of informants, and conducts the study in a natural setting.” (p. 15)

Several of the approaches used in qualitative research were developed to permit the investigation of phenomena to occur in their natural settings (Ritchie & Lewis, 2003). Qualitative research focuses on understanding by observing closely people’s words, documents, and actions, whereas quantitative research evaluates these words, documents and actions in terms of their numerical importance. The strength of a quantitative method is in its testing of hypothetical generalizations (Hoepfl, 1997) and in its ability to identify associations among two measurable phenomena (Creswell, 1998). Jointly qualitative research and quantitative research are valuable, but qualitative method should not be observed as an

effortless substitute for quantitative study. Qualitative research demands a considerable investment of time in the field including data collection, analytical processes, and the utilisation of social and behavioural sciences which do not have rigid guidelines. According to the literature review, most of the studies that investigate perceptions use quantitative research (Al-Kahtani *et al.*, 2006; Al-Dakheel, 2008; Al-Fahad, 2009). Nonetheless, the research questions and the systematic nature of this study prompted the use of qualitative methods which are more effective for: 1) exploring personal meanings within a culture, 2) understanding perceptions and attitudes, and 3) interpreting the culture and social traditions (Creswell, 1998). Using qualitative research for exploring the concepts in this study would provide participants with the opportunity to describe their teaching and learning experiences from their point of view. Qualitative methods are suitable to better comprehend phenomena (in this case the AL environment in Saudi universities) wherever little is known or when a researcher's objective is to identify the variables that might be later tested quantitatively (Hoepfl, 1997).

Accordingly, qualitative methods were used to gain rich descriptive data in order to facilitate the exploration of the phenomena. Three qualitative approaches were used to gather the data: observations, focus group discussions, and in-depth interviews. The AL environment entails different forms of common information, thus providing the opportunity to explore the various avenues of human communication so as to better understand participants' perceptions. Moreover, the three different techniques made it possible to gather other forms of information

from verbal, non-verbal, and written data from face-to-face. Therefore, exploring learner and lecturer perceptions and attitudes to AL did not require highly-structured methods of data collection; “Research problems tend to be framed as open-ended questions that will support discovery of new information” (Hoepfl, 1997, p. 49). To a large extent, I was able to go back to the field at a later date to gather further data to answer questions that arose through the initial data-gathering and through the data-analysis stages. This is a particular advantage of the interpretive method, which facilitates a cyclical model of research.

5.4 The Role of the Researcher

The attitudes of the qualitative researcher have important implications for this form of enquiry, this being reflected in Wellington’s declaration (2000) that the researcher influences the researched (p.41). As stated by Lincoln and Guba (1985), the qualitative researcher is required to do three things. Initially, the researcher should adopt the attitude proposed by the characteristics of the interpretative model. Secondly, the researcher develops the essential skills for gathering and interpreting data. Lastly, the researcher is required to prepare a suitable research design with accepted approaches for realistic inquiry. Consequently, for this project the researcher undertook the tasks of selecting a methodology suitable for answering the research questions, constructing the data-gathering techniques, identifying appropriate sampling, gathering data, and managing the analysis and interpretation processes.

Because of the social nature of the qualitative research, the connection between the researcher and the participants certainly was pertinent to these various phases. The skills of researchers can be assessed by their 'theoretical sensitivity', as explained by Strauss and Corbin (1990, cited in Hoepfl, 1997), and the 'theoretical sensitivity' of the researcher can come from a diversity of sources involving personal experiences, professional literature, and professional experiences (Hoepfl, 1997). Indeed, Strauss and Corbin (1990) characterize this notion by saying, that theoretical sensitivity indicates the personal quality of the researcher; "It signifies the consciousness of the accuracy of meaning of data... [It] indicates to the attribute of having vision, the capacity to give meaning to data, the ability to understand, and ability to discrete the relevant from that which isn't" (p.42). As a result, the researcher's professional and personal experience in teaching enabled heightened sensitivity to the data and the making of suitable decisions. As Lichtman (2010, p.16) explained, "All information is filtered through the researchers' eyes and ears and is influenced by his or her experience, knowledge, skill and background". With my own personal background and knowledge of Saudi culture - wherein people are not familiar with the sometimes-intrusive nature of qualitative research - enabled multiple data-gathering approaches to enhance the research data. Socially, people are hesitant to express their views and emotions publicly - for instance at a university. This was evident in this research when participants sometimes gave short, seemingly non-committal answers, but despite this the use of multiple methods made it possible to gain adequate data. Culture can influence data interpretation, and so understanding the

link between the qualitative researcher and the researched prompted the author to be especially aware of the need for impartiality. Nevertheless, it is difficult for any researcher to exclude himself/herself entirely from the data gathering and analysis processes. The reliability and validity of all research are linked to objectivity and thence trustworthiness, and Lichtman (2010) explains how qualitative researchers attempt to use various ways to exclude or minimize human prejudice by way of checks and/or triangulation, and this issue is discussed later.

As a qualitative researcher, I deem myself a 'research tool' – part of the research process - and thus the reflective theme (Radnor, 2002). Cohen *et al.*, (2007) suggest that highly reflective researchers are conscious of the ways in which their selectivity, perceptions, background, and inductive processes and models shape the research (p. 172). Reflectivity is a theoretical instrument for qualitative research and it aids in understanding both the nature of ethics and the practice of ethics in the research (Guillemin & Gillam, 2004). These writers also note that reflectivity is also a bridge to the procedural issues that can frequently appear out of place in the daily practice of social research. Reflection, they point out, is closely linked with the ethical practice of research and comes into roles in the arena where research ethics committees are not reachable (p.264). Consequently, reflectivity is a continuing process and occurs during every phase of the research. Reflectivity demands that researchers examine and observe their own hypothesis, roles, and prejudices in conducting the research and analysing its results (Wellington, 2000; Cohen *et al.*, 2007). Furthermore, it is significant that researchers maintain

awareness of their own beliefs and interpretations in the entire research processes. For instance, through the process of analysis the researcher here sought to develop subjects that are rationally consistent and reflexive of the data.

5.5 Methods

As noted above, qualitative methods were used to acquire rich data that would provide the researcher with a sound understanding of each participant's experiences. The interview method (Zimmerman & Wieder, 1977, cited in Wellington, 2000) was employed where questioning was used to explore issues in considerable detail. Observations provided a broad overview of educational methods and they facilitated the exploration of components that might have been missed in other methods. To answer the research questions three approaches were used to gather data: observations, focus group discussions, and in-depth interviews. For lecturers; several focus groups were conducted; in universities UQ and KS, two focus groups were arranged in each university; each group comprised six participants, and in university PN three groups were arranged, each containing 3-4 participants. For learners; 4 focus groups were conducted, each consisting of 5 to 6 in UQU, KSU and PNU three focus groups were arranged each consisting of 4 learners. In-depth interviews from 9 to 12 learners were interviewed in each university. Furthermore, I observed the learners and the lecturers through face-to-face learning. A summary of the data collection methods is demonstrated in Table 5.1. The timeline of data collection activities in this study is detailed in Appendix C.

Table 5. 1: Summary of the Data Gathering Methods

Participants	Observation			Focus Groups			In-depth interview		
	UQU	KSU	PNU	UQU	KSU	PNU	UQU	KSU	PNU
Leaders/ Managers		NA		NA	NA	NA	7	6	4
Lecturers	4	4	4	6	6	3-4	8	8	5
Learners	35	50	40	6	5-6	4	12	12	9

In order to further understand the context of the study, a formal meeting was conducted with the Chancellor of UQU; two informal meetings were held with three supervisors of AL in UQU, and one informal meeting with the respective supervisors of communication skills in both KSU & PNU. Furthermore, I attended a formal meeting with the Vice-Dean of UQU and with the course lecturers of AL at the same campus. The meeting with the Vice-Dean enabled her to explain her views regarding the college's implementation of AL courses, and it also led to a discussion of some preliminary results of this study. The Vice-Dean indicated that the college expected challenges during this stage of AL implementation. She had arranged to meet the lecturers to discuss the progress of the AL courses, as well as discussing the feedback from the programmes administration. Consequently, I had the opportunity to attend that meeting and be a non-participant observer of the lecturers' responses. The Vice-Dean reported to the assembled staff the preliminary results of this enquiry and discussed them with the lecturers. The programme is receiving on-going development, and it appeared that this study provided additional influence to the implementation of active learning.

Subsequently, I had an informal meeting with two of the supervisors of AL skills to discuss some of the challenges that face lecturers and learners, this meeting helping me to better understand some of the collected data.

All of the methods used in this study were supported by an information/topic guide which provided documentation about the nature and scope of this enquiry and which served as an interview agenda, a guide, and an aide-memoire (Burgess, 1984, cited in Ritchie & Lewis, 2003). Topic guides have to be considered as a tool for guiding the data gathering process, but not as an exact prescription of coverage (Ritchie & Lewis, 2003). Table 5.2: lists the main themes which were to be explored in the group discussions and interviews. The three core main themes that address the research questions are understanding of active learning, and the advantages and the disadvantages of active learning and challenges of AL. The issues of motivation and engagement were selected as subtopics when gathering students' perceptions, these issues being significant factors for success in learning. Training was selected as a sub-topic for lecturers' perceptions for the reason that it is a key factor in the formation of an active-learning environment. Supporting this point of view, Alonso *et al.* (2005) observe that pedagogical problems with AL need further effort to be resolved. The following stage was to convert the theme guide into interview agendas (Wellington, 2000) and an observation schedule for lecturers and learners.

Table 5. 2: List of Key Topics Examined in this Research

AL concept	Definition & Advantages
Students	Motivation Engagement
Lecturers	Training
Challenges	Implications
Social and Cultural Context	

Since this study was conducted in Saudi Arabia all data-gathering methods were translated and administered in Arabic. The topics and questions for discussion in the focus groups and interviews were tested in a pilot study and adjusted when needed. More information about the pilot study is presented in the next section which also provides an explanation of each method, and the rationale for its use.

5.6 Pilot Study

The purpose of the pilot study was to review both the research design and the suitability of the questions (and the wording of the questions) to be used in the focus groups and interview. Furthermore, the pilot study was conducted to appraise the reliability, validity (Cohen *et al.*, 2007) and of all the methods for gathering data. The pilot study also had the benefit of enabling the collection of basic data about the history and properties of the AL programme in the UQU, thus

permitting a better understanding of the strategies for the implementation of AL courses.

The Dean of the College of Applied Studies and Community Service granted permission for conducting the pilot study of the AL programme in the College. The fieldwork for the pilot study was composed of several elements: preliminary on-campus interviews with the administrator, lecturers, and learners participating in the AL programme; one week for gathering data from learners by way of in-depth interviews; and on-campus focus groups comprising learners and lecturers.

The participants in the pilot study were lecturers and undergraduate learners from the College of Applied Studies and Community Services in the Foundation year in Umm Al Qura University. Three lecturers contributed to a focus group discussion and they also provided information by way of interviews. Ten learners agreed to participate in two focus groups, though in the event only eight learners attended, these later providing data through interviews. These learners had been enrolled in the AL course in the previous semester. The pilot study also confirmed the suitability of the triangulation of the data-gathering; that is the use of observation, focus groups, and interviews. The pilot study strengthened the reliability of the three approaches, though the results were not considered in the outcomes and discussion of the analysed data.

5.7 Observation

Cohen *et al.* (2007) explain that observational data allow researchers to see things that might otherwise be missed, and to detect things that participants might not easily talk about in interview conditions. Observation was used in this study to gain information that might not have been achieved through other approaches and to disclose changes over time. As noted by Morrison (1993, cited in Cohen *et al.*, 2007), the observation technique allows the researcher to collect live data on programme settings (pedagogic styles, curricula, and resources). Moreover, the use of observations allowed the researcher to better understand the context of the educational courses, to discover elements that could be used in interviews and in focus groups, and they permitted the validation of information.

Observers can be participants or non-participants. Participant observers involve themselves in the activities they observe, while non-participant observers purposely endeavour to be as unobtrusive as possible so as to avoid bias (Cohen *et al.*, 2007; Wellington, 2000). In this project I elected to be a non-participant observer to avoid involvement in the assessment and thereby avoiding having any influence upon it. It is acknowledged, however, that “all social research is a form of participant observation because we cannot study social life without being part of it” (Hammersley & Atkinson, 1983, cited in Radnor, 2002). This view is also supported by Adler and Adler (1994, cited in Cohen *et al.*, 2007).

This study also entailed semi-structured observation in order to discover the

learners' and the lecturers' experiences of the AL environment and to generate in-depth explanations. Cohen *et al.*, (2007) stated that a semi-structured observation should have an agenda of issues but would collect data to highlight these issues in a far less predetermined or methodical manner (p. 397). Open-ended observation enables substantial freedom in gathering information, and in this investigation field notes were recorded and an agenda was employed to facilitate the recording of observations (Radnor, 2002).

In this study, the observational approach for data gathering was used effectively to evaluate the range and the implementation of AL methods in AL courses. The lecture hall observations concentrated on: (1) what lecturers and learners did at the start, during, and at the end of each lesson; (2) the range of suitable AL approaches which were applied/implemented by lecturers; and (3) if learners independently or in groups were free to express their views and to communicate with each other and with their lecturers (Alemul, 2010). I sat with the participants during their classes through their usual time and used an observation sheet to record what I saw, heard, and experienced through each teaching session (Gay & Airasian 2000). In total 12 observations were made, with two lecturers from each of the three sample universities being twice observed. (See Appendix A for field notes on observations).

5.8 Focus groups

Rabiee (2004) explained that a focus group is a method of including the use of in-

depth group discussions in which participants are selected because their feedback is meaningful, despite the fact that they may not necessarily represent samples of a precise population given that the group is concentrated on examining a given subject. A focus group is a precise type of group for the particular purpose of enabling the researcher to listen and to gather information (Lichtman, 2010). It is used as a means of understanding how people feel and think about a phenomenon. Usually, the participants are selected based on exact characteristics that they have in common that link them to the research topic (Greenbaum, 1998; Krueger & Casey, 2000). A focus group has been described as “A prudently planned series of debates designed to gain perceptions on a defined area of interest in a permissive non-threatening environment” (Krueger & Casey, 2000: p.5). Advantages of focus groups are that they can quickly provide information about needs, community attitudes, and norms, and they are an efficient way for a researcher to garner a range of deep information in a short time. However, they also have disadvantages; they require a good facilitator, it can be hard to analyse responses, and it can be difficult to schedule interviews around participants’ time requirements (Rabiee, 2004). A focus group can nevertheless be used for a wide diversity of causes and can assist a researcher in examining numerous target issues in a given area of research. As stated by Ritchie and Lewis (2003), focus groups provide an opportunity for the expression of various views and experiences to be immediately and openly discussed. For instance, one focus group involved learners with distinct opinions: a learner with no experience who had a negative view of active learning, and other participants who had affirmative positions on the

matter. This created rich debates and more information.

For this project four focus groups comprising five to six learners (Table 5) from various courses were conducted in two universities (that is, two groups in each campus); and in another university three groups were conducted, each with four learners. The group discussions were of 45 to 75 minutes duration. The members in each group were selected randomly from the pool of volunteer participants, and this arrangement provided each group with a mixture of people with differing experiences of active learning. Additionally, groups were held for staff members in each of the three universities; each discussion was of about 90 minutes duration, and in one university there were six participating lecturers and at the other two campuses the groups contained 3-4 members. Most of the lecturers were from scientific, medical, or literary disciplines and had experience in managing preparatory courses. Most of the participating lecturers had at least six semesters experience in the teaching of active learning, another had three semester's experience, and some were teaching AL courses for the first time. All participants engaged strongly in the conversations and were keen to share their insights. I attempted to have experienced lecturers in the focus groups because it was evident in the pilot study that the lecturers who had taught AL courses in the previous semester provided particularly rich contributions. Lecturers who had previous experience with AL appeared to be able to identify the strengths and weaknesses of the programmes and to recommend changes to increase their effectiveness.

Table 5. 3: Lecturers Background

Pseudonym	Age	Degree	Majors	Teaching experience	active teaching experience
Nouf	28	M.A.	Applied Science	4	1
Mohammed	40	PhD	medical	6	1
Deemah	26	BA	Literary discipline	2	0
Meshal	39	PhD	Business management	10	3
Rubaa	32	M.A.	Curriculum and Teaching Methods	7	2
Tahani	27	M.A.	Computer Skills	4	1
Sameerah	40	PhD	Mathematics	11	3

In this study, the questions posed to each of the focus groups was of a general nature, the purpose being to stimulate open debate (see Appendix A). Most questions focussed on the advantages of active learning, the obstacles to implementation, and factors that affect the use of AL methods. Nonetheless, specific, probing questions were used to encourage the discussion of different aspects of active learning.

To foster an atmosphere of comfortable informality the groups were convened in suitably relaxing settings in each campus. With the approval of the participants use was made of a digital audio-recorder to record the discussions for later transcription and analysis. The conversations were conducted in Arabic. I also made written notes to help explain any vagueness in the transcription. At the completion of each session the recorder was tested, the times of the discussions were noted together with any other comments that could elucidate the nature of

the information.

5.9 Interviews

From an ontological point of view, this study was also based on the assumption that “people’s knowledge, views, understanding, interpretation, experiences and interactions are meaningful” (Korpel, 2005). This epistemological view supposes that people talking interactively is a meaningful way to create data (Bryman & Bell, 2011). Additionally, discussions allow social argument so as to construct “depth, nuance, complexity and roundness in data” (Mason, 2002:65).

To complement the data recorded from the group discussions use was made of one-to-one interviews, the advantages of this approach being as follows: interviews can explore subjects in depth and in detail; they yield rich data and new insights; they provide a full range and depth of information (varied perspectives); they allow the interviewer to be flexible in administering interviews to specific individuals in specific circumstances; they allow the interviewer to explain or illuminate questions; they allow participants to express views that they might otherwise be reluctant to say in a public forum (Perakyla, 2005). The disadvantages of the interviews are that they: can be hard to analyse and compare; permit possible interview bias; require well-qualified, well-trained interviewers; possess a flexibility that can result in inconsistencies; may have an interviewee who will distort information through recall error, selective perceptions, and a desire to please the interviewer (Mason, 2002).

Depending on the need and design, interviews can be semi-structured insofar as they permit freedom of expression while maintaining a focus on the topic. This way an interview can have the advantages of both structured and unstructured formats and thus use both closed and open questions. (Chikwa, 2012).

So as to be consistent with all involved, the interviewer formulated a list of prepared questions which could be delivered in a manner that allowed the same areas to be covered by all interviewees. As the interview progressed, each interviewee was given chance to elaborate or provide more relevant information. For this study, each participant was interviewed following the focus groups in order to allow each interviewee to give more detailed descriptions of his/her experiences and views. Experiences involving personal advantages and challenges were investigated in detail with both lecturers and learners.

All the interviews were conducted in appropriate and informal settings on the respective campuses. They were held in small rooms, and to foster an atmosphere of informality and relaxation comfortable chairs and refreshments were provided. As with the focus groups, the meetings were audio-recorded to facilitate accurate transcription and analysis. Written notes were also made by the researcher.

The interviews were semi-structured and in-depth, the participants being encouraged to express their opinions and perceptions in their own words (Esterberg, 2002). This approach also enabled the interviewer to ask key questions

and to then investigate some issues in closer detail (Ritchie & Lewis (2003). Many studies have used semi-structured interviews to discover learners' and lecturers' perceptions of their learning environments, an example being the work by Keengwe (2014) who evaluated the experiences of UK undergraduates regarding active learning. The use of the technique of semi-structured interviews also had the benefit here of facilitating supplementary questions to guarantee full coverage of the topic and to give the interviewee an opportunity to clarify issues that they felt to be a priority (Radnor, 2002). The interviews of both lecturers and learners were designed to cover all facets of interviewee experiences and to enable full understanding of the concepts and principles of active learning. Three main themes were covered in the interviews: the expectations of the interviewee in regard to active learning, any obstacles she/he faced, and the advantages she/he had experienced. Most of the interview questions were open-ended. Some of the key questions were the same as those posed in the group discussions, this repetition being useful for obtaining data from respondents who had not contributed in the discussions and to garner information in greater detail and depth (see Appendix A).

The interview process was strengthened by the pilot study which presented the opportunity to experience the roles of both the interviewer and the moderator in focus groups. It was necessary to be an active listener (Radnor, 2002) and to prompt the interviewee to speak freely and offer interpretations and instances of her/his views. However, I became more cautious about moving between key

themes and about writing down any comments made during the course of interviews.

5.10 Sampling

This study utilized a criterion-based or purposive sampling method, an important controlling strategy in qualitative research. Purposive sampling is appropriate for studies that include sample elements with specific features to allow detailed examination of the dominant subjects that will be studied (Ritchie & Lewis, 2003). Ritchie and Lewis (2003, p 97) argue that it is vital to decide which standards will be used for purposive choice of the sample; “The choice of purposive selection criteria is influenced by a review of the aims of the study”. The selection criteria used here were that the participant should be a learner or a lecturer of any AL course provided in the science, medical, or literary disciplines, or in the management of preparatory programmes in the three universities. During the first week of the semester I obtained a list of all AL courses, the names of the course lecturers, and the number of learners in each course. Thirty-five lecturers were contacted, most agreeing to participate in the study and offering their contact details. Fifty-eight learners volunteered to participate. Further explanation about the participants’ backgrounds is presented in the following sections.

5.10.1 Lecturers

The lecturers held M.A. and PhD degrees in the subjects they taught. Their experience in university teaching ranged from between 1 semester and 4 years.

Their level of computer skills varied. Table 5.3 summarises the background of the participating lecturers. Active courses lecturers were mixed (Saudis and non-Saudis) and they studied their degree both in Saudi Arabia and abroad, allowing them to experience different learning styles. Consequently, the majority of them had been exposed to other teaching methods, such as AL and its strategies.

There were 35 participating lecturers in total in focus groups in the three universities, and there were 21 lecturers participating in interviews. All of these were using AL in one form or another (cooperative learning, problem solving, e-learning, etc.). They were from different disciplines: four were from applied science, three were from medical, two from literary disciplines, four from business management, two from curriculum and teaching methods, three from computer skills and three from mathematics.

5.10.2 Students

Participating students were selected mainly from the foundation year in the three universities; two participating universities taught special courses for AL strategies in the foundation year. Other participating students were selected randomly from other years in the three universities (the Saudi higher education system starts with a foundation year and the degree itself takes at least four years).

Table 5.4 illustrates the background of all of the participating students and Table 5.5 shows the background of the interviewed students. The majority of the students

begin their undergraduate study right after completing high school. Nevertheless, attaining admission to a public university is not easy, due to the steady increase in the number of applicants, which exceeds the capacity of public universities (National Centre for Assessment in Higher Education, 2009). Therefore, some students had studied for a short time in private institutions before being admitted to public universities.

Table 5.4: Background of all of the participating students in the three universities

Age	18-21
Level	Foundation through Year 4
Majors	Applied science, medical, literary discipline, business management, curriculum and teaching methods, computer skills, mathematics
Active learning experience	0 - 3 courses

Table 5.5: Background of Interviewed Students

Pseudonym	Age	Level	Majors	Active learning experience
Tagreed	18	Foundation year	Medical	1
Dania	22	Year four	Literary discipline	1
Fatimah	21	Year three	Curriculum & teaching methods	2
Samiah	19	Year one	Computer skills	1
Manal	18	Foundation year	Mathematics	0
Jumanah	20	Year two	Medical	2
Shatha	21	Year three	Business management	2
Jawaher	22	Year four	Curriculum & teaching Methods	4
Rania	19	Year one	Mathematics	1
Salma	20	Year two	Applied science	2

Generally, university students have participated in practical computer courses in high school. A student's active experience is based on his/her familiarity with the use of common applications, such as cooperative learning and brainstorm learning. Some of the participating students had already engaged in and completed one to three active courses; others were enrolled in an active learning environment for the first time.

The active courses are compulsory for students in all majors, and students of active courses, irrespective of their majors, were asked to participate in the study. Participants were studying from the foundation year through to Year 4 and were from various colleges.

5.11 Data Analysis

Qualitative data analysis is the most suitable method for analysing surveys that entail personal perceptions. Wellington (2000) states that data analysis conducted early in the research cycle are significant because it can affect the later data collection. Wellington (2000) also asserts that there is no one 'right' technique of data analysis, nevertheless there are general guidelines that refer to how it should be conducted methodically and reflectively. Data analysis entails organizing and explaining the data by such means as coding, identifying themes, and establishing categories.

This study used thematic analysis to identify subjects within the data. Thematic analysis can be used within various theoretical frameworks, and it has the advantage of applying the theoretical framework of the study, and the use of theories of social constructionism and constructivism as a basis for the process of analysis. In this, as in other such studies, the data were allowed to speak for itself. Subjects and themes were not predefined, but emerged from the data; that is, they were data-driven. Nonetheless, the appearance of categories from data relies completely on the judgement and thoroughness of the researcher (Wellington, 2000, p. 142).

Identifying themes embedded within recorded data may be difficult (Ryan & Bernard, 2003). These writers summarise several methods, two of which were applicable to this enquiry: the scrutiny-based technique and the word-based technique. The former was selected for this work, but it can demand intense time to locate unrecognized subjects (Ryan & Bernard, 2003). As reported by Ryan and Bernard (2003), the scrutiny-based method may be suitable when seeking to avoid sensitive cases or assuming that the investigator has previous knowledge of the themes. Also, it can be useful when examining the data from people who may not trust the interviewer, who may not wish to talk when others are present, who may not understand the investigators' questions (p. 93), or who may not understand the influence of these themes on the research. Hence, observational data were used in this study to explore elements that were also debated in the interviews and in the discussion groups, and to cross-check the information. For

instance, within the lecture hall observation it was noted that there was a little feedback from the lecturers, which seemed to cause poor interaction. This concern was also discussed with the learners and the lecturers in the interviews and the focus groups. Through the analysis it was found that some of the data needed more exploration and the participants were subsequently contacted for further clarification.

Even though a number of themes emerged from the data, it was anticipated that further themes could be hidden within the data, and for that reason at an initial stage use was made of the word-based technique to determine the categories. Throughout the data-gathering procedures I made written notes so as to identify topics as they appeared. In this study, I had an early opportunity to identify some of the key themes within the data, and accordingly I interviewed face-to-face and transcribed all interviews for the female while male participants were interviewed and transcribed through other means such as Skype, video conference and/or phone. I transcribed all of the recorded data of the focus groups and interviews and translated them from Arabic to English. Additionally, I read the transcriptions and notes many times to identify key words and themes. I accept with Braun and Clarke (2006) that themes assist in capturing significant issues with regard to the research questions that are not essentially reliant on quantifiable measures.

The substantial quantity of research data collected during this project required the use of computer-assisted data-analysis software. I was keen to use computers to

analyze my research data because they offer efficiency. Moreover, as commented by Ozkan (2004), large quantities of information demand the use of computers and appropriate software to aid flexibility and speed in coding, retrieving, and binding the data. Computer-assisted qualitative data-analysis programmes are especially useful for: helping automation and accelerating the coding process; providing a formal construction for writing and storage memos so as to evolve the analysis; and supporting further conceptual and theoretical thinking about the data (Barry, 1998). In this project Nvivo software (version 10) was used for the data analysis. This is a multifunctional programme system for the evolution, support, and organisation of qualitative data-analysis schemes. All the data were translated into English after codification of the focus groups and interviews with the purpose of importing the raw data to NVivo. Yet the programme was not used as a substitute for the personal involvement of the researcher. Encouraging this opinion, Ritchie and Lewis (2003) highlight that there is powerful advice that this software should be considered only as an 'analytic support' to assist the process of analysis and not as a substitute for the intellectual role that is required of the researcher (p. 217).

5.12 Data Quality

5.12.1 Issue of Trustworthiness

Educational investigators need to ensure the quality and thoroughness of their research. As stated by Silverman (2001) and Anney (2014), reliability and validity are two vital notions that are used in any dialogue of the credibility of scientific research. Nevertheless, Golafshani (2003) noted that these two terms, as specified

in quantitative research, might not apply to the qualitative research form, and he emphasized that the notions of reliability and validity are seen in a different way by qualitative researchers who consider these notions defined in quantitative terms as inadequate (p. 599). Because of the nature of qualitative research, the terms 'consistency' and 'dependability' are frequently chosen over 'reliability', while 'credibility' is further closely linked to 'validity' (Ritchie & Lewis, 2003). Moreover, it has been suggested that the terms reliability and validity are not seen independently in qualitative research; indeed they are inherent in such terms as trustworthiness, credibility, and transferability (Lietz & Zayas, 2010).

One of the modes to achieve credibility for a qualitative study is triangulation (Silverman, 2001; Creswell, 1998; Cano, 2000). Esterberg (2002) and Golafshani (2003) demonstrate the meaning and rationale of triangulation:

“Triangulation is frequently used to mean bringing diverse types of evidence to effect on a problem (Denzin 1989). Therefore, if you have access to observational data, interview data and historical documents, your analysis is probable to be much sounder than if you depend on merely one source of evidence. Because each type of evidence has its own weaknesses and strengths. With observation, you can essentially see how people behave; it lets you to see an entire process unfold over time. With interviews, you can gain vision into their feelings or causes for behaving in a particular way. Using multiple types of data lets you to balance the strengths and weaknesses of each” (Esterberg, 2002, p. 176).

In this study, triangulation was utilized with the hypothesis that the use of different sources of evidence strengthens the visibility, or accuracy, of research findings

(Ritchie & Lewis, 2003, p. 275). As an initial data gathering method, in-depth interviews were used, and subsequent observations and focus groups helped reduce the likelihood of inaccurate information.

Another measure of the worth of a research project is its 'transferability'; that is the degree of similarity among the original state and the state to which it is moved (Hoepfl, 1997, Loh, 2013), and its continuing ability to offer detailed explanations (Cohen *et al.*, 2007; Ritchie & Lewis, 2003). As discussed by Lincoln and Guba (1985) and Morrow (2005), the researcher cannot determine the transferability of results, but they can merely offer adequate information that can then be assessed by the reader to specify whether or not the results are applicable to a new status. Therefore, this study sought to offer enough information about the environment of the research, the research design, the results (involving quotes of participants) and the analysis procedures to let the reader evaluate its transferability to another setting.

5.12.2 Ethical Considerations

Ethics and morality play a significant role in educational and scientific research. As stated by Wellington (2000), an ethic is a moral principle that is concerned with people's behaviors and actions, and "the main criterion for education research is that it should be ethical" (p. 54). Ethical and moral concerns are of particular relevance where research has involved human subjects, human issues, and personal matters. Verma and Mallick (1999) and Alison & Rafael (2017) emphasize

the significance of morality regarding the rights of research subjects, particularly for classroom research that includes personal information about learners. Ethical accountability is vital at all stages of the research process; the study design; how participants are recruited; how participants are treated; and the consequences of their participation (Miller & Brewer, 2003, p. 95).

All ethical requirements and protocols were implemented in this project. With the endorsement of my supervisor, I obtained the Certificate of Ethical Research Approval from the Chair of the School's Ethics Committee of Plymouth University. This certificate confirms that the researcher would esteem the dignity and privacy of those participating in the research (see Appendix C). Permissions were obtained from the relevant deans in order to conduct the study of the AL programmes at the College of Preparatory Year at Umm Al Qura University in Makkah, the King Saud University in Riyadh, and the Princess Nora University in Riyadh. I understand that normally case study universities would be anonymous because I could reveal confidential information and cause problems for my participants, however, I discussed with the relevant deans to name their universities in this study and they all wanted me to name them. I did not name any participants and when I made negative comments about teaching, I did not name universities, so I minimized any harm caused by my study. One dean asked for a copy of the final study as he considers it as a good assessment for the university. He confirmed that the university recommended all researchers to provide a copy of their studies to the

university to be used by an assigned committee to check where the university stand from the topic under investigation.

According to the Ethical Guidelines on Research of the British Educational Research Association (BERA, 2011), participants have the right to be informed about the aims of the research and its results. In addition, a researcher should obtain informed approval before undertaking research. To meet these guidelines, at the first meeting with the participants the objectives of the study were made clear by way of written information which stressed the significance of providing honest views that could help raise the credibility of the research. Moreover, the researcher pointed out to the participants that the research findings would be used in the development of AL programmes in Saudi universities. Furthermore, participants were informed that they would be entitled to read the research outcomes. At the outset participants were fully informed of the expected time frame of the interview, and that the interviews and discussions would be recorded. It was emphasized that the audio-recordings would be stored securely and were to be transcribed by the researcher alone. Additionally, I informed them that contribution was not mandatory and that they had the right to withdraw from the study at any time. Contributors were requested to sign consent forms (sample in Appendix B) which described the objectives of the study and stated the confidentiality and anonymity of the data. Confidentiality is a key area of ethical issues (Cohen *et al.*, 2007). Confidentiality means that the researcher can match names with replies such as a face-to-face interview, but guarantees that no one else will have access to the

identity of the respondent (Miller & Brewer, 2003, p. 97). Accordingly, to ensure confidentiality and to mask participants' identities I used pseudonyms for participants. Similarly, anonymity was assured; that means that the researcher would not disclose the identity of any participant (Miller & Brewer, 2003, p. 97). The resultant data were then grouped and analysed by the type of respondents and then this forms the structure of the presentation of results in the following chapter.

Chapter 6: Results and Analysis – Views of Lecturers

6.1 Introduction

In the previous chapter the methodology used for this research was discussed and presented. The main focus in this chapter is on the presentation of the results from a series of interviews conducted with a sample of lecturers who reported their experiences and views in regard to the use of AL methods in higher education in Saudi universities. The interview structure and the questions for this study were designed by the researcher and were based on the literature review and on previous studies in the field of learning styles. Participants' perceptions are represented in three key categories: lecturers' understanding of AL, their views on the advantages of AL, and the challenges that they faced. The writer then considers the views of those who have been critical of AL, and the chapter concludes by discussing the relevance of this analysis for the future of AL in Saudi Arabia.

6.2 Results for the analysis of staff attitudes to Active Learning

As detailed in Chapter 5 (see Table 5.1 above), 35 lecturing staff from three universities (Umm Al-Qura University, King Saud University and Prince Noura University) participated in seven focus group discussions, and 21 were individually interviewed. Furthermore, I conducted 12 observation sessions, with two lecturers from each of the three sample universities being observed twice. To perform the analysis, the participants' responses were classified into three categories: lecturers'

understanding of AL; their views on the advantages of AL; and the challenges that they faced (for example, the challenges that arise when adapting to a new learning methodology). The lecturers' understandings of AL were explored through the focus groups and interviews, and their views on the advantages of AL and the challenges that they faced were explored by the three research methods (focus groups, interviews, and observations).

The attitudes of the participants are summarised below in table 6.1. An important feature that emerged from the triangulation was that some sub-categories emerged from more than one data-gathering method, which highlights the significance of that category. For instance, several participants stated that an advantage of AL is that it engages learners, this being a point that was repeated in response to a number of questions in the discussions and interviews.

Table 6. 1: Staff attitudes to Active Learning

Category	Data Collection Methods		
	Observation	Focus group	Interview
1. Understanding AL		√	√
2. Advantages of AL			
2.1 Increased Learner Performance		√	√
2.2 Pedagogy Improvement			
2.2.1 Variety of Instructional Methods	√		√
2.2.2 Increased Creativity	√		√
2.2.3 Learner Engagement	√	√	√
3. Challenges of AL			
3.1 Pedagogical Issues			
3.1.1 Course Redesign			√
3.1.2 Class size	√	√	√
3.1.3 Course Evaluation	√		
3.2 Learner Dependency		√	√
3.3 Teaching Approaches	√	√	√
3.4 Assessment	√	√	√

3.5 Criticism and Disadvantages of AL		√	√
3.6 Other Challenges		√	√

6.3 Lecturers' understanding of Active Learning

Research Question 2 (see chapters 1 and 5) asked how well lecturers understood the meaning of AL. In the discussions with the participants the lecturers were asked to explain their understanding of this term and how AL could be applied. Most of those interviewed at universities UQ and KS confirmed that they understood what AL entailed, but only a minority of those from university PN had heard of the term. However, it emerged that there was some confusion about the term; it became apparent that they already used such terms as 'cooperative learning' and 'problem solving' rather than an all-embracing term such as 'AL'. Indeed, the use of appropriate terms is important because for some lecturers a misunderstanding of the principles of learning methods could have affected the ways in which they employed suitable pedagogical theories in their own teaching. Transforming regular courses to active courses involves more than just transforming the content and delivery. That is, it entails more than merely replacing an oral lecture with a problem to be solved by students. It requires the lecturer to recognise that with AL, students may acquire understanding and knowledge in different ways (Cutting and Kelly, 2016). Students need to engage with the course material and actively participate in their learning. They should understand that they are the source of power in the AL process.

This issue also provides information in response to Research Question 5 (see

chapters 1 and 5) regarding the reasons for AL being introduced into tertiary courses. While most participants were previously aware of AL, on a number of occasions the Umm Al Qura University had provided workshops on how to use AL methods. When, during the focus group, the lecturers were asked about their awareness of, and preparations for, the introduction of the AL system, Lecturer L1UQ5 said:

“At the beginning of the semester, we received the report that clarifies the design of the active course. We were presented with a two-week workshop on how to use the AL style, organise the time and classes, then we started to teach the AL courses.”

This comment indicates that the lecturer had not participated in the decision regarding the introduction of the new approach. That is, the lecturers were informed of the decision and the model for AL courses was imposed on them.

Leadership is the main factor that facilitates the implementation of a new technology or introduces a new style of learning such as AL in educational institutions. Much research (Weiss and Pasley, 2009; Penuel, Harris, and Debarger, 2014) indicates that leadership and support are critical factors for professional learning experiences to be turned into changes in teaching and learning practices. However, it is not clear whether in these three institutions the university/faculty administrators provided adequate explanations or justifications for the imposition of a new methodology, though it seems that the active format was adopted because it was considered as a tool that contributed to raising overall

5 L1UQ means Lecturer one at University UQ.

standards of learning in Saudi Arabia. In response to Research Question 5, and as discussed in more detail below, it appears that AL was selected by senior ministry administrators because it is perceived to be an educational strategy which will help to improve the standards of the nation's graduates (Qadan, 2016). That is, it was not offered to university staff as a matter of choice; rather, it was selected as one part of the overall national programme for advancement and development (ibid). However, as some participants commented, the advantages of AL were apparently not always explained, though the participants reportedly discovered for themselves that it could achieve enhanced learning outcomes. Stephen *et al.* (2010) commented that lecturers must manage the expectations of learners, and this requires lecturers to explain what method they are using, and the benefits of using it. This means, however, that the lecturers themselves must be convinced of the merits of AL, and they must fully understand how this approach can be applied. FGPN⁶ (1) mentioned that:

“The absence of a clear guidance of the university leads lecturers to deliver their courses as they like....no instructions from the university to tell us from day one to use this or do not use that.... they left it in lecturers’ hand”

For some of the lecturers their unfamiliarity with, and poor understanding of, AL seemed to have diminished their acceptance of the system. For instance, Lecturer L1PN explained that she was very ambitious but that she was initially unconvinced of its merits and thus was wary about adopting it too readily:

“I feel ambivalent ...I do prefer traditional teaching... AL has helped in decreasing some teaching duties and add other types of duties”

⁶ FGC means focus group one at university PN

This comment is telling because it indicates that the lack of understanding of AL and its relative benefits hindered its acceptance. Equally important, it illustrates that individuals need to be convinced of the value of a new system; by imposing the new approach, and by failing to explain or justify its use, the university's administrators created unnecessary opposition and thus hindered its adoption.

6.4 Lecturers' perceptions of the advantages of Active Learning

Research Question 3 (chapters 1 and 5) sought information about the relative advantages and disadvantages of AL, and in response the participating lecturers described a range of experiences and offered a number of pertinent observations – both positive and negative. With the benefit of hindsight and experience, most (53%) agreed that AL can provide advantages to students and that it increases the quality of education being provided at tertiary institutions. But, conversely, only 38% of participants reported that AL is used as a general practice of teaching and learning even though they acknowledged the benefits of flexibility, adaptability to many subjects, courses, and topics, and that it is very effective for the development of various technical skills. The focus group discussions and the private, confidential interviews, proved to be useful avenues for obtaining data for answering Research Question 5, and the tone of the conversations were generally positive and supportive of AL. However, at this point it should also be noted that not all participants used AL; 40% of participants thought that it had been imposed on them and as a consequence they used it reluctantly or still favoured more traditional forms of lesson delivery. These varying responses are discussed later (see

6.1.2.5) but following are the advantages mentioned by the participants.

6.4.1 Increased learner performance

Despite the positive comments by many of the participants, AL has not yet been fully adopted or embraced as a better (or more acceptable) method of teaching throughout the Saudi education system. Nevertheless, the lecturers stated that the implementation of AL confronted orthodoxy by challenging the former lecture-based style and by introducing an approach that was, for many, an exciting innovation which promised markedly better learning outcomes. One lecturer who was stimulated by AL was Lecturer L2UQ, who explained that:

“I have concluded that the new learning style [AL] does have a positive influence on students. Also, lecturers recognise its significance and how such a method has an impact on students’ outcomes”.

There is partial-consensus among lecturers (at UQ University) that AL can have a major impact on students’ performance, as FGUQ1 explains:

“I have been teaching in the university for a long time.... using lecture-based methods...after using AL I found a remarkable difference in my students understanding and knowledge and also their performance”

This lecturer expressed the insight that AL has a major impact on students’ outcomes; that is, it has the ability to positively affect students’ performance and therefore their appreciation of the advantages of using such style of learning. Indeed, such perception can support implementing AL, as lecturers and students realize that AL offers more creative and inspirational types of learning – an important finding that provides answers to research questions 2 and 3. Even

though the use of computers and internet-based learning programmes has been expanding into all facets of life, some institutions (and individuals) have been slow to embrace change despite the many evident advantages. Nonetheless, during the course of the interviews and group discussions it was repeatedly stated that the adoption of AL methods helped students learn computer skills. For instance, Lecturer L1KS explained in her interview that she developed more positive views of AL because she had witnessed greater interest among students in the use of computers for learning:

“It is significant that learners identify the advantages of using a computer... an individual who does not use a computer can be regarded as illiterate... Now when learners are active-learners they use the Internet in a better way.”

This lecturer was encouraged to continue with AL because of the apparent enthusiasm of the learners. That is, the use of computers in AL encouraged greater motivation for learning and led, in turn, to a desire to become more competent in the use of current technologies.

6.5 Pedagogical improvement

Considered overall, the findings of the examination, and particularly the discussions and interviews, confirm that 39% of the participants noticed pedagogical improvements from AL. That is, they reported noticeable improvements in learning and understanding by their students, and the improvements stemmed from challenging their students to perform activities that involved analysis, problem-solving, and evaluation. This result has perhaps helped

the lecturers to overcome any negativity that came from being excluded from the decision to implement AL. The study also indicates that AL was found to give the majority of lecturers' confidence to practice a range of teaching methods and, consequently, to be more creative in the way they conduct their courses – as outlined in the following sections. This finding provides a strong answer to Research Question 3 insofar as it explains the key benefit of AL; that is, to elevate learning and standards.

6.5.1 Variety of instructional methods

One finding, also relevant to Research Question 3, which emerged from the discussions and interviews, was that for 35% of lecturers AL encouraged them to attempt different delivery modes. For instance, when asked to demonstrate the positive and negative aspects of AL, Lecturer L2KS expressed satisfaction with her active courses because she was encouraged to use a variety of techniques:

“It is very enjoyable. It certainly varies from traditional teaching in spite of the barriers and challenges. As regards pedagogy, I feel that my teaching methods are progressing ... I do not prefer the way of lecturing, so I like active instruction with some in-class lecturing.”

This comment shows her enthusiasm for new approaches, but it shows, too, that old methods – formal lecturing – have continued. Indeed, it appears that for 55% of participants lecturing is still seen to be a complement to active methods, perhaps because it is perceived to be a rapid way of imparting a lot of information in a short time. Moreover, some are unsure about the new method and lack confidence in how best to use it, the result being that they cling to old ways. Furthermore, to use

AL effectively, one does need to be expert in the content area, though more time may be required to prepare lectures. Using active learning properly therefore entails lecturers spending longer time than usual preparing for lessons. It seems likely that institutional leaders fail to take this into consideration when imposing AL strategies, and this helps explain the observation by Graham (2006) that lectures continue to be the norm in many institutions of higher education.

Lecturer LUQ4 gave her thoughts about teaching strategies in AL:

“Using AL strategy has contributed hugely to the way we deliver our lectures... we use the latest technology in our classes.... I believe that AL opens the door for innovation in teaching environment”

The experiences of Lecturer LUQ4 also show that the integration of technological instruction into AL has opened the way for other teaching strategies. The lecturer understood the need for innovations in teaching strategies and found these in an AL approach. She acknowledged the challenges of such new approaches, but she appeared eager to improve her pedagogy. She had experienced the transition from teacher-centred to student-centred strategies. Similarly, FGKS1 stated that:

“Student-centered learning is one of the key ingredients in modern learning.... student-centred classrooms make a better and more effective learning environment for students which focus on the students’ desire and ability to acquire knowledge”

Another example of this shift in focus was provided by those lecturers who reported using discussions in their learning environments, this being consistent with the survey findings of Steiner and Morberg (2006) at the University of Gävle. Nevertheless, this shift should not be overstated, since in one of the universities under investigation the majority (65%) of participants had avoided using AL and

few (15%) used it only occasionally.

As explained in section 5.7 above, observations can be very instructive because they can provide researchers with information that might otherwise be missed, and they complement the data garnered from other survey methods (Alebaikan, 2010). In this project, it was noted that despite the comments of some of the participants, other teaching methods, such as collaborative learning and projects, were rarely observed. In two universities under investigation AL and its strategies were to some extent implemented, whereas the common way of teaching in the third university was traditional lectures or non-active forms of learning.

6.5.2 Increased creativity

35% of participants stated that from their experience over the last few years, AL increases critical thinking skills in students and enables them to show initiative. These benefits, in turn, can increase the students' creativity. According to Downing (1997, p. 4) a general definition of creativity is, "the process of producing a new whole out of existing elements by arranging them into a new configuration". During the course of her interview, Lecturer LUQ5 made the perceptive observation that creativity is encouraged by the new teaching environment:

"People are often resistant to new things ... nonetheless once she/he gets familiar with it, he/she can be creative. This is what occurred to me. Each semester I become more excited and motivated to raise my skills in teaching using the AL method."

Lecturer LUQ5 found that teaching active courses was a positive experience, for by adopting active teaching she was able to teach creatively. Her comments

provide useful information regarding Research Question 3. In this context, lecturers tended to use the term 'creative' to mean being interesting, inventive, and imaginative in the ways they use activities to teach particular topics. Lecturer LA5 was interested in using new methods such as online quizzes, puzzles/problems, and discussions, all of which tend to be student-centred, although they are evidently not yet used much in Saudi Arabia.

As Fernando (2007, p. 21) wrote, creativity in teaching refers to the use of different (possibly unfamiliar) strategies which will help students comprehend the main concepts and ideas of the text or topic, and creativity means that the lecturer devises alternative ways of presenting the subject so that students are stimulated – as opposed to being passive. In this study, the design model for some active courses required using discussions to measure students' understanding of the topics. Lecturer L3KS mentioned the importance of discussions:

“Using discussion in the classroom enables students to give their best.... When using it with my students I found a remarkable improvement in their performance...students show their enthusiasm and confidence to participate positively in the classroom”

The lecturers understood the value of discussions – and of all interactive communications – to facilitate creative and effective teaching. Moreover, use was also made by some participants of discussions to post lecture notes and to review problems linked to assignment files. Furthermore, discussions and other communications were able to be focussed on learners' enquiries and concerns. One of the lecturers used alternative strategies to encourage learner engagement

by dividing the students into groups for active discussion.

Observations can be a useful research tool because they can identify matters that might be ignored in other research methods. This was certainly the case in this project because despite the various AL techniques available for stimulating group involvement and communication, the periods of research observation showed that in some classes of one of the universities under investigation there was a lack of interaction, and relatively few collaborative activities were observed in most discussions. This finding indicates a poor understanding of AL strategies among lecturers and a failure to adequately apply meaningful active methods in the university. Consequently, it became apparent that there is a need for training in innovative teaching methods to promote learning and improve creative teaching. Henriksen and Mishra (2013) agree that creative teaching is a difficult skill and cannot be learned in a short time. According to Cachia *et al* (2010), creativity includes the capacity to imagine or create something new, the attitude to agree to change, and an enthusiasm for continuous improvement. As Simplicio (2003) explained, lecturers need to work hard to develop creative approaches to teaching, and that entails the lecturers themselves having full mastery of innovative strategies. One key finding of this project is that tertiary lecturers need to develop the competence and confidence to be creative and imaginative when designing their own active courses.

6.5.3 Learner Engagement

The use of instructional techniques can be beneficial for instructors and students alike. It gives instructors valuable experiences in using technology effectively in their professional development courses, preparing them to use blended models creatively and strategically as this approach becomes more and more prevalent in the classroom. Lecturer L4KS explained that:

“It was a great opportunity for instructors to pass an intensive training course in developing and teaching attractive courses before implementing blended courses in the university”.

The integration of different technologies with traditional forms of teaching and learning has the effect of engaging students. As reported by the participants in the focus group and in the interviews, and as seen in the observation sessions, the application of a range of activities fostered greater levels of interest and engagement than mere verbal presentations. By way of example, Lecturer L6UQ explained that:

“Instructors are increasing the number of challenging assignments that engage all students in displaying creativity and problem solving ... Good visual design positively affects the way learners respond to and comply with a blend of instructional techniques and encourages greater engagement”.

This is consistent with some learners' perspectives in relation to behavioural engagement, and two lecturers noticed that their students' cognitive capacity (that is, their understanding and reasoning) was enhanced and stimulated in ways that were not achieved by traditional oral presentations. They stated that this allowed them to interact better with their learners, and each was better able to comprehend the other's thoughts. For example, Lecturer L3PN explained:

“Amongst its advantages is the rise in interaction between lecturers and learners.”

Lecturer L5KS provided extra clarification in her interview:

“AL lets me interact with my learners, comprehend their thinking and present them with themes to discuss. Whether there is a positive relationship between AL and having a deep understanding of what one learns needs further investigation, however. It is a very big step for students who have to become familiar with utilizing active methods”.

Comments such as this indicate that students’ active participation in classroom discussions generally improves their overall learning. Supporting this comment, the researcher has observed that learners post useful information, which may indicate that they are benefiting from the new approaches. Furthermore, it was reported by some of the participants that face-to-face interactions between lecturers and students provides opportunities for learners to express their thoughts with more confidence. Lecturer L6UQ, who conducted an AL course, said:

“I promptly reply to my learners’ posts in the discussion so as to encourage interaction”.

During LUQ6’s classes, the researcher observed that student participation in the active discussions was very high and very enthusiastic, a finding that supports the results of Huerta (2007) who wrote that active, directed, and purposeful discussion in class time is a very effective mechanism for learning.

While activities can generally foster engagement, not all participants were convinced. Even though many of the participating lecturers appreciated that AL provides opportunities for more interaction with their students, some were rather

negative on this point, admitting that there was not always adequate two-way exchanges or feedback. That is, not all lecturers provide adequate feedback to students, not all students respond positively to comments by lecturers, and some were uninterested in discussing the work.

6.6 Lecturers' Perceptions of the Challenges of Active Learning

Similar positive and negative responses emerged when considering the challenges, some viewing them as annoying barriers to their usual teaching regimens, others perceiving them to be minor impediments. The participants cited a number of challenges, and the lecturers identified facilities, equipment, and, sometimes, a lack of skill when using modern educational technologies. Another challenge – or rather a hindrance - was the apparent lack of coordination between the different levels of management, administration, and teaching staff about how active learning could be accommodated within the universities' programmes and courses.

6.6.1 Pedagogical Issues

The implementation of AL brings with it practical problems, but it also has important pedagogical implications. Moreover, it entailed additional work for most lecturers. Lecturer L4PN provided a clarification in his interview:

“I believe that using AL is extra burden on lecturers...if the university is a serious in moving forward with AL it needs to revisit its regulation.... lecturers need to spend long time in preparation his/her courses... and the number of students are still the same”

Information provided by the participants shows that matters of particular concern

were the need to redesign courses, group capacity (that is, the need to have groups that were neither too large nor too small), and methods of course evaluation. Furthermore, the researcher has noticed that students need to be trained and qualified to use the AL method, and some classrooms may not be adequately equipped to accommodate activities accompanying AL. These issues are explained in the following sections.

6.6.1.1 Course Redesign

The general model of AL was mandated by university administrators, but the task of converting that over-arching philosophy into practice was the responsibility of the teaching staff who had to develop suitable course content and new active-learning materials. The contents included lecture notes presented in PowerPoint slides, participatory class discussions, assignment formats, online quizzes, and any other activities that could be used to promote understanding of topics. Some lecturers explained that they worked collaboratively to modify existing learning materials and to develop new instructional aids. It appeared that this process helped less experienced lecturers avoid pitfalls such as materials that were too brief, too complex, too long, or otherwise inappropriate.

While many participants were generally satisfied with their efforts to redesign both courses and materials, the researcher noticed that it was not always clear which topics were suited to particular techniques of AL, Lecturer L7UQ explaining that the selection of appropriate parts of the curriculum for active methods entailed

careful consideration. During the course of her interview she complained that some topics were inappropriately converted to active material:

“There are some subjects such as history and Arabic literature that are not suitable for AL. These subjects have to be given in a traditional lecture format.”

However, this participant did not explain why these subjects are not suitable for AL. This statement indicates that AL is still in its early stage in the university as there is no consensus between lecturers about which subjects are suitable for AL and which are not.

Activities need to be appropriate for achieving the course objectives, the participants commenting that – for some academics at least – a lack of experience in instructional design impeded the process of implementation. Some participants highlighted the importance of effective course design. For instance, L5PN stated in her interview:

“In addition, lecturers need training in instructional design. We were not provided with any workshops relating to pedagogy or instructional designs ... yet this is vital for AL lecturers”.

Comments such as this certainly confirm the conclusion of Fink (2003) who showed that lecturers' skill and experience in course design affects the success of AL experiences for students. One result of this is that it was clear that designing AL programmes demands sufficient experience in instructional design.

6.6.1.2 Class size

Class size can be a serious issue for lecturers. The researcher's observations

showed that classes that are too large preclude some students from active involvement, while small classes can lack sufficient stimulating interaction. 57% of the participants revealed that evaluating learners' involvement in active discussions and assignments can require additional time. L5PN explained the difficulty of moderating a large number of learners when active forms of instruction are used:

“AL courses are a good choice, nonetheless I prefer to have small numbers in the groups. This semester I have six groups, each with 40 -50 learners, and last semester 60 - 70 students. AL is very effective - but the problem is how to manage large numbers”.

The participants in the focus group indicated that it was time-consuming to have large groups, with limited scope for meaningful interactions and feedback. They argued for reductions in group sizes in order to maintain better moderation, FGPN2 stating that:

“It is quite difficult, if not impossible, to deliver our subjects in AL for 70 or 80 students in the class...how is it possible to teach 70 students in a theatre using AL...AL can be implemented only in a small class with an average number of 30 students”

This view was also expressed by Gibbs (2009) who mentioned to that a large group might have a negative impact on students' overall performance as they need a longer time than does a small group to complete planned activities.

6.6.1.3 Course Evaluation

On-going appraisals and reviews are important for the maintenance of educational standards, but how that should be done, and by whom, are points of debate. One useful avenue for improving courses, curricula, teaching materials, and teaching

methods is to obtain feedback from students. However, it is telling that the contributing lecturers had not given any consideration to course evaluation - except for one academic (L8UQ) who used online discussions for surveying her learners' views on AL.

"I used online surveys to assess AL course... I have received some positive feedback from students...this survey, however, has to be done across the institution and not just as an initiative from me".

That survey by L8UQ yielded mostly positive responses, though some students voiced concerns about the structure of the course and about class discussions. However, the survey was of limited value because the respondents' names were visible to peers, that being a strong disincentive to express honest opinions.

Neither did any of the administrators use student feedback to evaluate AL courses. It would be expected that a wide variety of factors would be included in any such evaluation, nonetheless senior administrators of one university merely undertook cursory appraisals of the delivery of the activities by the lecturers, this being performed by some staff observing selected classes, the results then being presented verbally to the Vice-Deans. As an observer, I joined the assessment meeting when the Vice-Dean discussed the results of the assessment with the lecturers. She expressed concern at the overall outcomes of some of the AL courses and encouraged lecturers to improve their delivery methods for the learning environment. The meeting provided lecturers with the opportunity to give feedback on their experiences, though I did not know if that feedback led to any further changes.

6.7 Learner dependency

One of the much-vaunted benefits of active techniques is that it encourages students to work independently, but not all participants found this to be true. 38% of the lecturers acknowledged the importance of independent-research and the fostering of the study skills of students, yet in the focus group and the interviews they often stated their concern about their students' limited ability to manage their own learning programmes. Tertiary students everywhere might be influenced by their earlier educational experiences, and most are familiar with teacher-centred environments in their high schools. But at tertiary institutions there is the expectation that students will be responsible for their own learning and participate in AL courses. Several lecturers (28%) were concerned about their students' capacity for disciplined, independent, self-guided learning. For instance, L8UQ said in her interview:

"We should train our learners in AL and guide them on how to be active learners. It is not good that a learner starts AL courses without any training. In addition, learners need to comprehend where to go if they face any problems".

This means that students have not had opportunity to use AL method in their high school or in their preparatory year (Cutting & Kelly, 2016). Therefore, this comment highlights the possible value of a preliminary training course for learners when they enter a university and when they undertake courses that involve active methods. Another lecturer recommended preparatory and introductory programmes prior to commencement of AL courses. Eison (2010) highlights that lecturers should help learners be active participants in the learning process, and also the importance of helping them develop the relevant skills for studying in an independent learning

environment.

Discussions of AL focused on the positive aspects of implementation, but there can be negative consequences too. Around 25% of participants voiced concern about the disincentive effects of active courses; that is, active techniques can reduce a learner's performance. During observations, the researcher noticed some students avoiding classes and failing to attend important activities. Some participants added that AL needs more work from students whereas sitting in a lecture is easier and more pleasant than engaging in activities and discussions that require thinking about complex subjects. Furthermore, some students, according to 21% participants, do not think that they need it. This leads to the importance of the training that can be organised prior to commencing with an AL approach. For instance, Lecturer L6PN said in her interview:

“AL needs preparation for students to be active in the classes...some students do not want to spend a time before lectures...therefore, they try to avoid attending classes which will not help... it is rather has a negative impact on their performance”

Attitude and enthusiasm toward education is another factor that might hinder the AL implementation, where some students who fail in AL courses do so because they lack both study skills and self-discipline, and they may not appreciate the importance of class activities. Lecturer L7KS provided an insightful analysis of this issue:

“I think the problem we face is that some students fail to complete their work and neglect their tasks because they do not want to study in general, not because it is AL. We should not blame AL. Learners do not realise that missing class activities

can be a reason for failing courses.” They think that AL is just an experimental programme that does not affect their scores”.

It emerged that 30% of lecturers were unaware of the influence of teaching strategies on learners’ performance. Also, this comment by Lecturer LUQ9 who highlights the point that:

“Learners need to be fully aware of the significance of participating in all the class activities”.

Furthermore, lecturers have to encourage their students to attend AL training classes. They need to know that they can learn best when learning is active, when they are mentally involved, and when they engage in hands-on activities.

While students are encouraged to be disciplined independent learners, there is a strong element of coercion, lecturers being requested by their college to record proof of class attendance through the weeks of AL. The students were required to access the course online and to respond accordingly. This usually entailed confirming that they had downloaded the lecture files. Describing this arrangement, Lecturer L7PN said in the interview:

“I believe it [class attendance proof] controls learners... there needs to be a special way of controlling their studies. This approach confirms that the students were able to download the lecture notes, so they do not come on the day of the exam and say they were not able to download the file”.

the researcher noticed that the matter of student attendance arose during the course-evaluation meeting between lecturers and the Vice-Dean, and that some of the former were critical of the time required for recording proof of class attendance. Moreover, in that meeting it was said that several lecturers did not

respond to their students' complaints, their negligence apparently causing a decrease in students' attendance points and consequently their scores.

6.8 Teaching Approaches

Many active techniques can be used according to the subject being taught, most participants expressing positive views about their experiences. Two relevant instances were recorded in the interviews (L9UQ):

"I have practiced AL over the past six years. I am interested in it and have positive views about it. It is precisely the way in which one can learn best. It has a positive effect on my students as it raised their performance, particularly those who were lower-performing, as they gained greater benefits from AL than students who are already achieving high grades".

Although this claim needs to be investigated and studied as to what extent the AL raised students' performance, many advantages have been noticed from the above participant; AL have been adopted for more than six years, it has a positive effect on students' performance, and students who have lower-performing tendencies would gain greater benefits as L8KS and L10UQ stated respectively:

"I have undertaken training that has helped develop my teaching techniques. I previously regarded AL as a waste of time. However, now I can see practical benefits because learners learn more when they are engaged in activities that make them contributors and not just passive recipients."

"I have constantly encouraged students to learn by activity rather than through passive listening and note taking. AL has been strongly embedded in my teaching for several years. Moving away from the notion that the typical lecturer is a 'fount of all knowledge' has been very liberating! When you have created the atmosphere for more AL in which students make contributions, then I find that the learning environment grows by itself and you learn alongside the learners."

However, not all participants were so enthusiastic. Some lecturers were noticeably

uninterested in any new methods; others were undecided, preferring to continue with the old while making selective use of the new – an example being Lecturer L8PN, who commented:

“My experiences of AL methods are that both formal lectures and AL methods have positives and negatives. My learners do feel that they ‘received’ more out of the critical thinking (AL) methods since they had to take control of their own learning. Generally, I believe I teach best with a blend of lectures and debate that I continue to the end of the semester”.

Many reasons can be reported behind why some lecturers were not enthusiastic or interested in using AL in their classes. The main problem is the time spent preparing AL lessons, since the preparation time needed to create new AL instructional strategies will often be greater than the preparation time needed to "recycle old lectures". Furthermore, it takes longer to efficiently cover course content. This, according to 35% of participants, was not taken into consideration when implementing AL.

6.9 Assessment

While 41% of participants were generally positive when describing their experiences of active methods, on the matter of assessment there were misgivings. During the interviews 27% of the participants stated that they were unsure how to assess students who had attended AL classes. For instance, L11UQ expressed confusion, and it also seems from her comment that she did not fully appreciate the function and methods of AL:

“If I set learners an assignment, an essay, then they will go out and they will be active and try to answer it. They will be active in answering the question ... well

what I'm still unclear about in my own mind is what makes AL different from what we presently do instead of being just an add-on"

A similar tone of uncertainty was expressed by L9PN who described learners' lack of comprehension of what was required of them. For instance:

"Few of my learners appear to understand fully what they are doing – they try to guess or anticipate the "the correct response" to open-ended problems. Also, they may fail to recognize the need for evidence about critical questions, and the problems they make up are systematically trivial. Consequently, nowadays much of the time I ask closed kinds of questions, for example true false, matching, and multiple-choice".

55% of lecturers had problems with the quantity of work that was required to adequately assess a student's level of learning as L10PN indicated:

"One of the things that I decided to do, and I've done for the past four years, is to give the learners a chance to present their thoughts and demonstrate what they have learned. They can do this by presenting a portfolio of their work and explaining it. This approach gives me an opportunity to evaluate what they've done, and to give them comments and feedback that they can use in the final documents that they submit a week later. That is good, but I sometimes have about a hundred students."

This method of assessment would enhance students' work and therefore their performance. The main issue with such assessment, according to the participant, is the required time to assess a hundred students. Consequently, the university needs to take into consideration the number of students in classes or reduce the number of teaching hours for lecturers. However, 32% of participants reported that lecturers using suitable methods of assessment for AL. Lecturer L9KS commented:

"The coursework and assignments altered the way learners read. Instead of reading to remember facts or lists, I gave my learners challenging and practical questions... this helped them to think critically about the source or reference they had just read, instead of just memorizing information for final exams. For me, this

helped me assess their problem-solving ability instead of merely accepting solutions. When remembering information solely for an exam, students tend to remember isolated facts and information instead of fully comprehending larger concepts from the source”.

Another participant stated that many lecturers noted that in most groups there would be some learners who were passive whereas others did all the work. For instance, L12UQ mentioned to that:

“Some of the cooperative teams in my session are not working well. Their assignments are sketchy and imperfect, and some team members keep complaining to me about others not contributing. Due to this and the large size of the groups, I use short answer questions, true-false, and multiple-choice”.

6.10 Criticisms and disadvantages of Active Learning

Referring to research questions 1, 3, and 5, the data revealed a number of challenges, disadvantages and obstacles to the implementation of AL. The discussion above has considered the various positive views and comments of those participants who endorsed AL and who found it to be generally beneficial to their teaching and to student learning. However, it must be noted here that less than third of participants were negative, and very few were hostile to the approach. Interestingly, the majority of those who do not support implementing AL were from the third university under investigation. This was because that the university has not yet introduced AL as one of its teaching methods. The few participants who support AL implementation, and who were from that institution, were using it based on their prior experience at other venues. That is, some participants from that university had transferred from other institutes where they had already experienced AL.

For some lecturers, it represented a methodology that required more effort and preparation than their usual lectures, and others found that it did not enhance the level of learning of their students. As mentioned above, Saudi culture is very conservative and thus there is naturally a high level of uncertainty of any new techniques, especially those that might have emerged from other countries. Similarly, there was slight resentment by a few (and by some of the older lecturers, who might have well-established lecturing presentations) that this new system was imposed on them and that they had not been able to contribute in the decision-making process. That is not to say that all people, or all lecturers, are opposed to adopting new systems; rather, it is a recognition that individuals prefer to continue using methods that have worked in the past. Indeed, it was evident from the generally warm tone of the discussions that most contributors seemed to have enjoyed the challenge of trying new technology-based styles of lesson presentation.

20% of participants commented that AL methods did not seem to achieve any noticeable improvements over their former lesson systems. For instance, Lecturer L9KS reported that for her classes there were no evident benefits. She commented:

"I am concerned that the new approaches are becoming overused. Without a wide range of source data as references for the 'problem' which learners have to address there is considerable conjecture. In such situations, it appears that learners are busy, and enjoy the activities, but they seem to remember the expected results without really challenging their own current notions. I do not support the idea of 'active listening', but I feel that existing lectures could be much more helpful and effective by using simple steps to let learners review what has been debated."

The experience of L9KS suggests that she tried activities in her classes, but those activities were not used to illustrate or explain principles or processes relating to the subject. That is, she felt that she could have described those principles and processes just as effectively in a lecture format.

Lecturer L11PN reported a rather different experience. She explained that she encountered opposition, and regarded her efforts as a waste of time because she had to repeatedly explain the various aspects of the topic:

“When I attempted AL in one of my lessons, some of the students hated it. A few refused to participate and aggressively rejected the approach. Because of their lack of cooperation most of the time I had to clarify and explain the steps for each problem”.

It is not possible to explain why these participants were so negative in their comments because they did not detail the circumstances of their classes or their methods. It can be conjectured that they did not adequately prepare suitable activities, or perhaps they were resentful at having to spend time developing new lesson formats. Nevertheless, regardless of the reasons, these comments may lead to that AL has not been universally embraced, and it must be acknowledged, too, that AL may not necessarily suit all learning situations.

7.11 Other Challenges

As noted above, universities in Saudi Arabia were different in adopting and implementing AL, there were still a number of difficulties that were common to all universities under investigation. AL implementation still faces many challenges in

Saudi universities. Some have been mentioned above, and most involved the positions of lecturers, the lack of support, classroom conditions, and lack of time to complete their work. Instances of these are mentioned in the following:

“I believe several AL methods need group interaction. For groups, adaptable classroom environments with movable chairs and tables work better than fixed and seats and tables. In my university, one of the difficulties that impedes AL methods is the inflexible facilities, the fixed classroom furnishing and layout.” [L13UQ].

“My experience is that AL entails slightly differing roles for the lecturer and the learners. AL makes lecturers into facilitators and organisers, and students take more control of their own learning processes. Actively contributing in the class ... may be perceived as a failure of the lecturer to do his/her work properly. There may be ... a feeling that the experience and knowledge of the lecturer is lost (and unavailable) to the learners. Such factors make AL seem to be a practical hindrance, even though it is advantageous.” [L11PN].

“I found that AL gives me less chance to provide content ... therefore I need to choose whether there will be material in examinations that was not covered in class. If so, I should be aware of the need to reserve class time for dealing with any extra challenging topics” [L10KS].

“Hypothetically, AL is helpful, but in practice it is difficult – even impossible - for several reasons such as large classes, the work load of lecturers, a lack of suitable teaching material, a lack of interest, and many complaints from both lecturers and learners.” [L12PN].

The above statements have shed light on the challenges that face AL implementation in some Saudi universities. Universities have, according to 25% participants, introduced AL as a new learning method but have not changed their policies. For example, the working hours (i.e. office hours, lectures, departmental meetings, required research for promotion, etc.) are still the same.

Throughout the interviews, the participants were questioned about their general

perceptions regarding AL as a teaching method. There was a range of responses; 40% of participants voiced positive opinions, 35% closer to accept it more than reject it while 25% said that it was not suitable for them or their courses and were not implementing it in their own teaching.

6.12 Conclusion

Results showed that AL has not yet been fully or adequately implemented in Saudi universities. It is still initiative that based on leadership and/or lecturers' desire. It has not taken institutional processes to be approved as a way of learning within universities courses. Therefore, universities in Saudi Arabia were different in adopting and implementing AL, there were still a number of difficulties that were common to all universities under investigation. AL implementation still faces many challenges in Saudi universities. Many factors that affect AL implementation across the universities under investigation, poor understanding of, AL seemed to have diminished lecturers' acceptance of the system. Although a few expressed resentments at the imposition of the system, many encountered practical difficulties on points of detail, such as how to assess the learning acquired by way of active methods. To this point, it was not clear whether the university/faculty administrators provided adequate explanation or justification for the imposition of a new methodology. Therefore, the researcher concluded that average of 40% of participants had positive attitude toward AL implementation, 35% closer to accept it more than reject it while 25% believe that it was not suitable means to deliver their courses.

Chapter 7: Data Analysis and Results- Views of Students

7.1 Introduction

This chapter discusses the second part from the analysis and results of the work. It focuses on the responses of students and their perceptions of active learning. Qualitative data from the transcribed interviews, focus groups, and observation were analysed in relation to learners' perceptions, understanding, and challenges of using AL in Saudi universities (see the research questions 1&4 in Chapters One and Five). In the analysis that follows, verbatim quotes are provided as a means of illustrating and enriching the findings.

7.2 Learners' attitudes of Active Learning

The data collected from the participating learners is analysed in this section. The data of the learners' attitudes have been classified into three categories: understanding active learning, the advantages of active learning, and the challenges of active learning. The researcher collected the data of learners' attitudes using different data sources such as interviews, observations, and focus group discussions, the results being summarised in Table 7.1.

Table 7. 1: Students attitudes to active learning.

Category	Data Collection Methods		
	Observation	Focus group	Interview
Understanding Active Learning		✓	✓
Advantages of Active Learning			
• Skills Development	✓		✓
• Learner Engagement	✓		✓
• Learner Performance			✓
Challenges of Active Learning			

• Learner Skills	✓	✓	✓
Instructional Strategies			
• thinking critically or creatively	✓	✓	✓
• speaking with a partner, in a small group, or with the entire class	✓		✓
• expressing ideas through writing	✓	✓	✓
• giving and receiving feedback		✓	✓
• reflecting on topics that they study	✓	✓	✓

7.2.1 Learners' understanding of active learning

One of the objectives of this study was to explore how well the participants understood the term 'active learning'. Participants who were attending the University PN stated that they had never been introduced to this term. However, when questioned further it emerged that other terms, such as 'cooperative learning' and 'problem-solving', had been used by the college administrations, and subsequently, by the lecturers and learners. This misapplication of the term 'active learning', and the lack of pre-enrolment information for students about the modes of subject delivery, appears to have affected the students' expectations of what they would be doing. When, during the course of the interviews, they were asked 'What was your initial expectation of the active course?' 30% replied that they expected the learning to be entirely active. For instance, Student S1UQ⁷ explained:

"I expected AL to be fully active...so I was happy that I was going to study by activities. I did not like AL at first, but later I got used to it. As it is, I need to prepare myself before lectures".

⁷ S1A means Student one at University UQ

Students were asked about their understanding of AL and how it can help them to have a deeper understanding of what they are studying. The majority of students, more than 52% of participants, particularly at UQ University, agreed that understanding is more important than memorising. For example, S2UQ said:

“I believe that there is no any creativity in memorising things....as students just copy what they told which limits their ability to generate insight or creative idea”.

Another participant, S1KS, agreed with her that just memorising things can kill the innovation:

“Understanding things is the corner stone in education...it can help to convert ideas and concepts into one’s own words.... therefore, learning by doing allows us to understand, which leads us to see meaning, effects, and consequences...rather than just the basic idea or concept”

They felt that ‘active learning’ was a new way of saying ‘learning through cooperative problem solving’ and that this approach fostered students’ understanding as opposed to the rote learning of facts; also, it can be applied to diverse contexts and problems. Furthermore, they were aware that AL enabled them to understand the subject in an intimate way that could never be achieved through mere memorization. Around 38% of the participants at Universities UQ” and KS” believed that “learning by doing” was a great method to accommodate new knowledge through experiencing and assimilating newly acquired information into their current conceptual understanding. For example, according to FGKS2 who stated:

“Learning by doing providing us the opportunity to share our results of the experience and self-evaluate our performance as a group.”

However, some of these participants were those who had studied a special course in active learning. They were well prepared to adopt this new method of learning. Umm Al Qura University offers course degrees through an AL model by which instruction is delivered entirely through activities. During its initial period of implementation, lecturers put more emphasis on active instructions and thus reduced face-to-face class time given to students. The reason behind this, according to administrators, is to allow lecturers and students to get used to active instruction. During the time of this pilot study, 45% participants expressed dissatisfaction with the programme, primarily because it was a new method that had not been used in their earlier basic education (secondary or high school). During the second stage of the active-learning implementation, which was the time of collecting the data for this research, part of the face-to-face instruction was being replaced by active instruction. Consequently, 35% the participants expressed a high degree of satisfaction with some elements, as will be discussed below in the 'advantages' section.

7.2.2 Learners' perceptions of the advantages of active learning

Learners' perceptions of the advantages of AL was assessed in the relation to the three universities under investigation. As AL is still in its early age, only 38% of learners expressed positive opinions about their experiences of active learning, this result being in accord with the findings of previous researchers (Ross & Furno, 2011; Ismail, 2011; Randeree, 2006; Burt, 2004). In this investigation, participants listed several advantages of active learning, in particular the development of study

and IT skills, the ease of access and the flexibility of the system, the user-friendly tools, and the enhancement of learners' engagement and performance. These issues are discussed in detail in the next section.

7.2.2.1 Skills-development

More than 41% of participating learners stated that AL enabled them to practice and improve some important skills – IT skills and research skills, for example. These students recognized the advantage of AL in fostering these two skills, though other skills such as personal skills and critical-thinking skills, which had been surveyed by Nealy (2005), were not acknowledged. The learners surveyed by Nealy (2005) had said that web-based learning helped them to improve several generic skills, such as personal skills and critical-thinking skills. Also, cooperative and collaborative team activities had assisted them to be more effective as self-sufficient learners. These two studies (i.e. the current study and that by Nealy - 2005) indicate that different institutions might implement different strategies and thus would focus on different skills to achieve their objectives.

During the researcher's observations, it was noticed that 34% of the participating learners were confident and knowledgeable when undertaking some activities, such as cooperative learning, think-pair-sharing and problem solving, all of which was a sign of self-reliance. Nonetheless, a student at UQ university was the only participant from that institute who actually referred to increased self-reliance:

"I believe that the new learning method (active learning) encourages self-reliance among students in the learning environment" (SUQ3).

28 % of participants from KS university reported that AL enabled them to be self-reliant and independent in their own studies and their own research.

“Changing learning style in the university over the last two years or so has developed skills such as think-pair-sharing and problem solving where student share her thinking with her partner.... then lecturer expands the "share" into a whole-class discussion.” (FGKS2)

Additionally, more than 32% of participants recognized that AL had assisted them to increase their computer literacy and to develop their ICT skills. One student at KS university stated:

“It was a great chance to have studied a course in computer skills that enabled us to develop our ICT skills” (SKS4).

Similarly, a student in FGUQ2 stated in her interview:

“There are several advantages to this new learning approach ... I was not used to the computer before joining active courses... however, now these courses have assisted me to use the computer in doing my projects and submitting them. I can use the computer quite well now” (FGUQ1).

These examples highlight how increased computer literacy was one of the indirect advantages of implementing AL in a university. Indeed, more than 59% acknowledged how the computer had assumed a main role in all aspects of their education. They found that computer-based methods had enhanced their own learning, and they had also become more confident in their own IT skills. This finding accords with the findings of Tubaishat *et al.* (2006), who said that a high percentage of learners at Zayed University in the United Arab Emirates and the Jordan University of Science and Technology had found that online learning

assisted them to develop their computer technical skills.

Learners who had already developed good ICT skills, which ranged from a basic knowledge of ICT skills, such as identifying and using icons (folders, files, applications, and shortcuts/aliases) to proficiency in using productivity software (understanding and knowing how to use Microsoft Office) prior to enrolment, were keen to attend the courses which applied AL methods. It was evident that previous experience of ICT influenced the willingness of some to use those skills to their advantage in their courses, as explained by a student at university “B”, a learner who had already developed advanced IT skills:

“I was very happy to hear about the availability of active courses. I like using technology in general and I consider this to be a very interesting style of learning” (SKS5).

This statement came as no surprise; technology changes the experience of childhood not only socially but also in respect of both economics and culture. According to Davies (2010), technology has the greatest influence on the world today; we are constantly surrounded by it, and modern life would be almost impossible without it. This comment, however, indicates that learners’ attitudes vary according to their level of computer competence, their confidence in their own skills, and perhaps their understanding of the merits of active learning. Certainly, there was a positive association between students’ prior levels of IT literacy and their favourable attitudes to active learning, a result similar to the work of Donohue and Richards (2009).

Other participants acknowledged how AL strengthened both their confidence and their ability to use the Internet as a research resource. That is, they became more competent in using web-based systems to locate information and to complete research projects as part of their active courses. A student from UQ university explained in her interview:

“I think that AL assists Saudi learners to improve their computer literacy... I search the Internet to find appropriate articles for my assignments and for my own learning” (SUQ5).

At this point (it is discussed in detail in Chapter 9) it should be noted that despite such positive comments, at this stage only 30% of participating students acknowledged that they had benefited from the active courses insofar as the activities encouraged the use of online research resources. This figure is relatively low because AL is still quite new in Saudi Arabia and other Middle East countries where lecturing and rote learning are long-established forms of education. As explained in Chapter 6, in conservative societies change generally comes slowly because there is a natural reluctance to accept new, unfamiliar ways of doing things. This situation entails universities providing the requisite new resources to their students. According to one student from UQ university:

“In our campus there is no real library...it was just to say that we have a library...after implementing AL, lecturers request us to prepare well for lectures which entails a lot of research...unfortunately the library that we have in the campus does not have the appropriate resources”

This lack of accessible resources is certainly a barrier to AL in UQ University because there is only a small library on the female campus while the main library (located on the male campus) had limited access for women. Because of the

segregation rule, female learners can access the main library on only one day, at the weekend. This is an obstacle and a challenge for female students, though it can be circumvented to some extent by the use of the Internet and by access to the digital library that was established at King Saud University in 2010. This, however, can be considered as an advantage in implementing AL in such circumstances. That is, using AL encourages students to use online research resources and overcome the limited access to the library for girls in “UQ”, as students have already demonstrated.

7.2.2.2 Learner engagement

The learners reported that the new experience of participating in active courses presented them with an opportunity to be more involved and immersed in the learning process. They mentioned that they learn more when they participate in the process of learning, whether it's through discussion, practice, review, or application. They were aware that AL required them to reflect on ideas and how to use those ideas. That is, focus the responsibility of learning on learners who engage with the contents and cognitively become active in the learning process.

Around 25% of students focused on the contribution of AL to their level of understanding of a given subject. Commented student SPN1:

“AL helps me to memorise and understanding of contents”.

Furthermore, students felt that adopting AL improved their academic level in other ways:

“AL increases student skills such as critical thinking, communicating, reading, and writing”. (SPN2).

It is known that students often resist the amount of work lecturers assign to them or spend too little time preparing for class, studying for exams, and writing papers. Implementing AL might help to change these bad habits, a point emphasised by SUQ5:

“Increases our attention span and time on task”.

AL might be a more attractive method for learners than more passive forms of learning because they can become more motivated and interested when they have a say in their own learning and when their mental activity is challenged:

“I feel excited when using the AL strategies... it is outstanding... I enjoy using the cooperative projects, problem-solving strategies etc.... I do the assignments with my peers and discuss topics with them...” (SKS5).

Although the previous quote was very strong in its endorsement of AL, still there was a high percentage (35%) of participants who expressed the view that listening to lecturers and concentrating on what they are saying is better than listening to their peers, as SPN3 said:

“For me focusing with lecturers is much better, we waste our time in discussing with my classmates...lecturers have deep understanding of what they are saying. Therefore, it is a great chance for us to listen to them.... we can spend a long time with my colleagues in our spare time...but lectures is to provide us with the required knowledge” (SPN3)

Peer support is also considered a feature of AL, and 20% of participants placed an emphasis on how peers' posts facilitated their individual reflective learning.

Students explained that the intensive process of eliciting their thoughts in a text-based form helped them achieve a deeper understanding:

“Peers’ posts can be useful in acquiring a deeper knowledge of the material presented in the lectures” (SUQ6).

Furthermore, peers’ posts contributed to the capturing of the bigger picture and to the promotion of a continuous – rather than a fragmented – learning experience:

“Peers’ posts helped me to connect different subjects: how this topic can be linked to that other topic, how this technique can be applied in that situation”. (SKS5).

The core elements of AL are student activity and engagement in the learning process (Prince, 2004). Such engagement and participation in class activities might contribute positively to the student’s performance, a point also noted by Trowler (2010). Moreover, physical engagement was accompanied by cognitive engagement that involves searching, analysing, and criticizing (Smiley & Anderson, 2011). Engagement means working with others, peer-to-peer learning experiences long being recognized as an effective avenue for learning (Smiley & Anderson, 2011). This was corroborated by Wood and Tanner (2012), who wrote about the positive influences of lecturers’ activities on students’ standards of cognitive engagement. Cognitive engagement can emerge in students’ interactions and arguments, though of course such engagement can occur via reading and analysing without interaction too. Indeed, this could be the situation regarding the learners in this current study because it was noted that cognitive engagement was not explicitly mentioned by the lecturers. Similarly, enhanced learner reflection

upon course contents was not part of the teaching strategy. Nonetheless, the kind of assignments and themes of classroom discussions in the AL courses forced the students to search for the solutions in textbooks and in other sources. The role of the lecturer in facilitating interactions in AL is discussed more in the challenges section.

7.2.2.3 Learner performance

In two universities (UQ&KS) more than 40% of learners reported that AL methods had assisted them to raise their GPA, and they generally expressed satisfaction with their performance:

“I prefer AL methods and I wish that all my courses could be active. AL increases my understanding of contents and helps me to gain deeper knowledge, which assists me to raise my GPA” (SUQ6).

A similar percentage of participating students reported that those who were educated through AL methods generally achieved better results in their exams:

“Students in AL classes outperform those in traditional lectures”. (SKS6).

The same student added that;

“They are studying the same subject but with different lecturers”.

The question of whether exams were identical or not in the same subject was investigated, and an administrator confirmed that the policy of the university mandates that exams should be identical in the same subject. This tells us that implementing an AL method with the university would be based on a lecturer's desire to do so, for there is no control by the university leadership, faculty deans,

or departmental heads to unify the learning methods throughout the university. This result agrees with the finding of Vernadakis *et al.* (2012), where learners' performance had been enhanced when AL strategies have been adopted and implemented. Moreover, in this study more than 34% of learners agreed that AL suited them, enabling them to improve their performance:

"I am studying some courses using AL and some through a traditional approach... I found a big difference between the two methods.... I like the AL style as it gives me more understanding and a deeper knowledge. Less time is needed when revising for exams, but it takes longer to prepare". (SUQ7).

These results might reveal the possibility of the existence of a relationship between AL and students' performance in Saudi universities. This study, however, is not designed to investigate this relationship.

7.2.3 Learners' perceptions of the challenges of active learning

In two of the three universities under investigation nearly 40% of participating students said they would be enthusiastic about enrolling in active courses in the future.

"I think it is a wise to enrol in AL course in the future... it gives students the right tools to gain skills needed of using active learning" (SUQ8).

However, they expressed some frustration at some issues that impeded the efficiency of active learning. For example, an obstacle often mentioned was the lack of Internet access on campus, and their lack of skills in areas like IT, research, personal and/or critical-thinking skills, all of which would be needed to make full use of active methods. More than 25% of participating students complained that

they were dissatisfied with the new learning environment as they had not been adequately prepared. They reported that many of the required skills for AL were absent:

“We have not learned research skills or critical thinking skills in our basic education” (FGPN3).

Although a few private schools provide ‘soft’ skills (e.g. critical-thinking skills or presentation skills) or technical skills (e.g. IT skills) in their curricula, public schools in Saudi Arabia do not provide such skills. Consequently, the university must provide training for all students in the preparatory year in order to guarantee a uniformity whereby all students are at similar levels with regard to these skills.

7.2.3.1 Learner skills

Some of the impediments which students experienced were connected to their skills, the main ones being their inadequate ICT skills, study skills, and time-management skills, all of which were mentioned in the observation, interviews, and focus groups:

“The university does not provide us with enough training to use AL properly” (SPN5).

“I have not had a chance to learn research skills or critical thinking skills” (SKS7).

The dilemma here is that it might be that some students do not like AL and may try to find some excuses for not using it. In fact, there are many reasons for this, such as resistance to change, and a sense of protest against the fact that AL entails a lot of work and preparation. Therefore, the university needs to ensure that all

students have the same training and have the same level of understanding of AL and its strategies. A minority of students (less than 20%) expressed negative opinions linked to their poor research skills:

“This is the first time I have tried to do some research about any given topic”
(SPN6).

Deficient IT skills were another obstacle to using active learning, with a few students quite unfamiliar with the Internet and technology-based activities, preferring to continue with traditional learning:

“I do not have sufficient experience with using the Internet and its applications”.
(FGUQ2).

Although Saudis ranked first among Arab youth for following and using Twitter and Facebook daily on the Internet (Alomiri, 2016), there are still some who do not use the Internet. A few of the participating students (less than 15%) reported that they didn't have computers at home. A university, however, is able to overcome this issue by providing computer labs in each building within the university to ensure that those who do not have access to computers at home can always turn to the university's facilities.

Some participants (23%) did not enjoy or benefit from active courses. SKS8 admitted that she spent a long time browsing the Internet, though with little concentration on her study.

“I use the internet in a daily bases for a long time...I spend hours working on it...YouTube, twitter etc...but very little for subjects”. SKS8

This was an example of activities and the Internet providing distractions in the classroom environment. Supporting this finding was a study by Al Alhareth *et al.* (2013) who stated that some of the students at the King Saud University in Riyadh had poor performance records as a consequence of spending extreme hours on the Internet, even while participating in such activities as brainstorming, teamwork, and inventive thinking. In response to such experiences, Al Alhareth *et al.* (2013) recommend providing guidance, via workshops and seminars, to students to alert them to the negative sides of the Internet and to provide training on how to use AL strategies and on time management. This finding highlights the significance of focusing on tasks as well as on effective use of study time. The importance of time management was mentioned in the reflective comments:

'I cannot manage my study time whatsoever. I attempt ... however, I do not know how to use my time well. It will assist me if I can do this better. I wish I could do it' (FGUQ1).

If students undertake a well-prepared course in AL skills and its strategies prior to their preparation year, it might resolve such issues and raise students' skills in using AL and gain the promised benefits from using it.

Many learners (40%) had no prior experience of AL strategies either at university or at high school, some expressing concern about the shift to AL where they were unable to achieve good results:

'I am dissatisfied with my progress ... I do not have experience in AL skills such as critical thinking, research skills and the presentation skills suitable to AL courses' (SPN7).

In the focus group some participants (28%) described their inability to adapt to the new techniques, one student saying that she used to ask friends or relatives to help her in doing some research and submit her computer-based assignments, and she often missed the online quizzes. Moreover, these learners claimed that these courses negatively affected their GPA due to their lack of AL skills and their inability to be involved in the activities. They added:

“Those who have good experiences with AL in their high school or in the preparation year achieve better results than those who do not”

This statement aligns with the finding of Vaughan (2007), who wrote that AL skills are an essential factor that affects learners' results positively. Be that as it may, the statement that having an experience of AL would affect students' GPA needs to be investigated, which is not within the current study scope.

7.2.3.2 Instructional strategies

In analysing data that related to instructional strategies, the participants expressed a degree of satisfaction with some active teaching strategies and dissatisfaction with others. Many instructional strategies have been investigated with targeted learning: (a) thinking critically or creatively; (b) speaking with a partner, in a small group, or with the entire class; (c) expressing ideas through writing; (d) giving and receiving feedback; and (e) reflecting on topics that they study.

7.2.3.2.1 Thinking critically or creatively

Critical thinking or creativity is one of the main instructional strategies to be focused

on by educators at every level of education. The researcher noticed that not all students, however, possess the thinking skills to analyse and synthesize information without practice. Therefore, lecturers need to provide students with some strategies to help them develop critical thinking skills:

“We have not had prescribed material, lectures, or any other methods that help us to develop our critical thinking skills” (SUQ11).

This student was very keen to develop her critical thinking skills and for this to be reflected in her learning process. It is not possible, however, to become an excellent thinker simply because one wills it:

“Improvement in critical thinking is like improvement in ballet or any kind of sports... we need training”. (FGKS2)

Development in thinking is a gradual process requiring plateaus of learning (Paul & Elder, 2006). Therefore, an important finding here is that universities need to introduce a package of training including all AL strategies in the preparatory year in order to ensure that their students are well prepared for AL methods. Other participants from other universities, which provide AL as a training course before they start using instructional strategies in their modules, have a different view:

“Doing college-level work without thinking critically is a lot like walking blindfolded.... I have learnt critical thinking skills in my basic education.... the faculty has provided us with good training in our foundation year” (FGUQ1).

“I have studied my basic education in England for years... I am aware of the importance of critical thinking skills in education generally, let alone in AL classes.... I believe that critical thinking allows us to analyse outcomes, compare ideas, synthesize information and draw conclusions from a given body of knowledge....” (SKS10).

‘Critical thinking helps me a lot in understanding contents properly in the class and saves me time when revising for quizzes and final exams’. (SUQ13)

This leads us to the conclusion about the importance of cultivating this skill in students from an early age, as it was quite clear that those who had this skill had positive views for AL and its implementation.

7.2.3.2.2 Speaking with a partner, in a small group, or with the entire class

Aldous Huxley (1958) once wrote, "Language has made possible man's progress from animality to civilization" (p. 167). Using language (particularly speaking) in the class and speaking with a partner, in a small group, or with the entire class can bring the curriculum to life and helps students explore the content and understand how it relates to their own ideas, values and experiences. Interaction between students therefore helps to make learning more powerful. Students learn from each other, and most participants supported speaking with partners and to some extent in a small group:

“I like to discuss with a partner most of the topics...we sometimes do it out of the class...in a break...or by phone without any direction from the lecturer” (SKS13).

The researcher noticed that there was considerable variety in the students' levels of discussions, with some students being far more prepared to actively engage in discussion than their partners.

This skill is easily adopted and used:

“I gain a deeper knowledge when I have a discussion about any subject with a partner or in a small group in the class”. (FGPN3).

“I like discussion in the class about any topics...I feel that such a discussion can help us to improve our understanding about the targeted topic” (SUQ13).

Some participants (25%), however, placed provisos on this positive view about discussion with a partner/small group:

“I recommend discussion, but for those students who prepare well for the topic...sometimes I prepare well for the topic, but my partner does not understand the topic” (SUQ14).

Such an arrangement can make the discussion unproductive and uninformative, particularly if one, or both, partners are not well prepared for the lesson’s discussion. Consequently, the burden lies with the lecturer, who needs to ensure that all students achieve a similar level of understanding in one form or another. On the other hand, there are a few students who were not happy to (or in fact do not want to) engage in any form of discussion. They felt that such a discussion would waste their time. They thought that the lecturer could give them deeper knowledge and information than their classmates:

“I believe that the lecturer is better than my classmates in terms of providing knowledge... we need the lecturer to use his/her time to deliver his/her speech...and not spend time listening to my classmates” (SPN9).

“I have tried to prepare for a discussion but Could not do so... I have too much homework to do every day” (SUQ15).

This answer, however, leads us to think about cultural issues. Students should culturally accept that AL is not just activities in the class. It is a full package of activities in the class and at home. It could be online over the weekend by way of blogs, or by other social media. The researcher noticed a lack of confidence among students in giving a presentation to the whole class. Furthermore, more than half of the participants were concerned about addressing the entire class due to worries

over their presentation skills and their ability to stand in front of a group of people. The majority of participants (55%) expressed a fear of giving a presentation to a full class:

“I am beyond terrified and I am convinced that it's going to go horribly wrong” (SKS11).

“I find it hard enough just to talk to one person”. (SPN10).

The issue here is not accepting or rejecting AL methods but rather a presentation phobia. Students SKS12, SKS13 and SUQ16 reported that:

“We have never given a presentation.... Have never attended a presentation skills course.... We are not ready to do it”.

As with other strategies, those who studied the AL course were to some extent qualified to give a presentation at any time. Therefore, at least in this case (speaking with the entire class), the main issue of not using this strategy and gaining the fruit of sharing information and knowledge with their classmates through presentations to the whole class was not related to their beliefs about AL and its benefits, but rather with the concept of presentation itself.

7.2.3.2.3 Expressing ideas through writing

Writing can be used to communicate/express what has been learned, as a method of evaluating what is known, and as a means of exercising active learning. In active learning, assignments and/or written reports can be given to students to be worked on individually or in groups. It begins with individual learner reflection and expression. Learners then need to develop their own ideas, which will be

expressed through writing. 41% of learners expressed dissatisfaction about writing a piece of work in one form or another:

“I study some courses using written assignments and in others I do not I agree that after writing the assignment my understanding improved in the subject...but the issue is that the assignment entails more time.... I do not have enough time to write a good report”. (SPN10).

“Writing an assignment needs special skills that I do not possess... when I was asked to write an assignment I ask for help from others... because the university does not provide us with the right training” (SPN11).

Writing an assignment needs a range of skills, and they include research skills, critical thinking, summarizing, and knowledge about the subject, to name but a few. These skills, however, have not been taught in the preparatory year. On the other hand, some learners expressed satisfaction with this strategy:

“I am now in the third year.... I found a big gap in my overall results between subjects that apply this strategy and those that do not ...in favour of those subjects that use assignments and written reports” (SUQ17).

“I've learned a lot from searching and writing reports...as an overall understanding of the subject...which was reflected in my exams at the end of the semester” (SUQ17).

Therefore, it could be said that writing has become an even more challenging task, especially for university students. Frequently noticeable weakness in writing has been the main concern for many lecturers who teach skills such as writing and composition.

7.2.3.2.4 Giving and receiving feedback

Giving and receiving feedback is one of the most important methods in improving the level of teaching and learning activities to increase the quality of education. It

is one of the main pillars upon which the AL class structure is built. The need for giving and receiving feedback has become a central element in education. It is, however, rather difficult for students who do not know how such feedback should be given:

“My lecturer asked me to provide feedback on my peers’ work...it is quite difficult to give feedback because I do not know how to do it” (SPN12).

Learning goals should be clear for students, since feedback is essentially information about how the student’s present performance relates to these goals. Engaging students in reviewing their peers’ work required considerable contemplation, particularly around the actual feedback. The lecturer should provide students with instructions detailing the process and how to provide feedback (Moore and Teather, 2012):

“I believe that to give proper feedback one needs to know how to do so... and to have critical thinking skills” (SPN13).

“Giving comprehensive feedback on any piece of work is not an easy task...to achieve objectives of doing so...the university needs to improve students’ skills to give constructive criticism” (SUQ18).

The most effective feedback is confirmative, critical, and constructive in nature (Nicol & Macfarlane-Dick, 2006):

“My lecturer usually asks us to comment on our classmates’ work...it is a good way to learn from each other” (SKS14).

“Providing feedback by commenting on the work of peers enables us to develop our understanding of standards which we then transfer to our own work” (SKS15).

31% of participants were aware of the importance of giving and receiving feedback

and believed that such a strategy was related to the quality of the work that they submitted to the university, and it developed their understanding of the standards they were required to achieve. The main issue regarding gaining the full benefits from feedback was that lecturers only focused on interaction between students as they exchanged their work to give their comments. They gave students' work to their classmates to give feedback. Feedback, however, needs to be given mainly from lecturers, as they are able to link it explicitly to learning goals. Most lecturers (more than 63%), however, do not give regular feedback on students' work because of the high number of students in class and the workload that they have. Consequently, they use students to perform this task is not the right way of achieving the objective of implementing such a strategy.

7.2.3.2.5 Reflecting on topics that they study

Critical reflection is an important part of any learning process. Students' academic success requires not only action, but also reflection on what they have done, what they are doing, and what they will do. Reflection has been defined as "active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusion to which it tends" (Dewey 1991, p. 9). According to Salomon and Perkins (1989), in an AL environment, reflection helps students to understand how their learning and problem-solving strategies might be reapplied and allows them to relate new knowledge to prior understanding. Reflections, however, entail deep understanding of the subject under investigation:

“We have been trained well in the preparation year for an AL strategy...particularly for reflection... through Learning Journals” (SUQ19).

“Our lecturer usually gives us range of reflective exercises such as: personal assessments of group-work, or reflections on feedback from oral presentations and essays... I agree with it...but it does take a long time to do” (SUQ20).

“The lecturer asks about our reflections on how we dealt with the various topics in the course... it is interesting...all students are fully engaged in the classroom”. (SKS16).

Using such a strategy, therefore, might help to enhance students' involvement in class activities. It is hoped that through reflecting and writing about new information or ideas, learners can better understand and remember them (Lew and Schmidt, 2011). 25% of participants, regardless of their domains of study, stated that reflection had helped improve their learning:

“Using such a strategy forces me to prepare well for the lecture...which in turn improves my understanding in the subject” (FGPN1).

There were some participants (35%) who were, to some extent, against using such a strategy. They believed that the lecturer could implement this type of strategy partially (e.g. in one topic but not for the whole course). They reported that implementing the strategy forces them to spend more time revising and preparing for topics, which they never used in their study:

“Implementing such a strategy takes a long time to prepare, and it's the first time in my entire learning life that I have had this problem” (SPN15).

“I believe that traditional learning gives us a time to study and achieve a reasonable grade at the end of the semester” (SUQ21).

Such participants, however, were not keen to understand the course content or achieve its objectives. They just wanted to pass the course, regardless of what grade they achieved:

“Reflecting on what we studied requires skills that we do not own...deep understanding of the topic...critical thinking analytical skill “(SKS17).

Successful students need, however, to develop certain skills and qualities: tolerance of diversity of ideas, curiosity (e.g. there has to be a willingness to ask questions), patience (not jumping to conclusions), openness (to absorb what is happening), and honesty (students need to be honest with themselves and this includes being honest about doubts and uncertainty or lack of knowledge).

7.3 Conclusion

In summary, this chapter has reported the second part of the analysis and the results of the research, and it has focussed on the experiences of students and their perceptions of active learning. Qualitative data were analysed to explore learners' perceptions and understanding, and the challenges of using AL in Saudi universities. The data of the learners' perceptions have been classified into three categories: understanding active learning, the advantages of active learning, and the challenges of active learning.

It was found that many (but not all) students in Saudi universities under investigation were pro-active in their learning approaches. Most participants believe that “learning by doing” is an effective method for accommodating new

knowledge through experiencing and assimilating newly acquired information into their current conceptual understanding. While only 38% expressed positive opinions about their experiences of AL it is expected that this figure may rise over time as students become more familiar with all the features of AL.

Many activities such as cooperative learning, think-pair-sharing and problem solving were adopted and implemented in many courses at the three universities, and as noted above, these methods helped about 40% to raise their GPA and thus their satisfaction with their performance. Furthermore, participating learners expressed a degree of satisfaction with some active teaching strategies and dissatisfaction with others. Many instructional strategies have been investigated with targeted learning: thinking critically or creatively; speaking with a partner, in a small group, or with the entire class; expressing ideas through writing; giving and receiving feedback; and reflecting on topics that they study. There was a degree of consensus among participants in all three universities that these strategies are important and could contribute positively in understanding the content. A key concern that emerges from the analysis in this chapter is that universities have not always provided adequate training for their students. Therefore, universities need to introduce a package of training, including all AL strategies, in the preparatory year to ensure that their students are well prepared to adopt an AL method.

Chapter 8: Results and Analysis: Leadership, Training and Saudi Culture

8.1 Introduction

This chapter analyses the data and the results from the research into leadership, training, and Saudi national culture and their impact on active learning. Section 8.2 discusses leadership in selected Saudi universities, and section 8.3 considers the training needs required to support AL implementation. Then section 8.4 discusses whether Saudi culture is a supportive factor for AL, or a barrier.

It has been argued that leadership is an essential factor that can support the implementation of active learning, though conversely it can also act as a barrier to this style of learning within institutional settings. Therefore, to examine leadership within the selected universities the researcher used semi-structured interviews with people in senior positions, and they included a chancellor, pro-vice chancellors, deans, and departmental heads. This method was selected because it allowed the researcher to examine their attitudes, behaviour, practices, experiences as leaders, and their perceptions of leadership.

8.2 Leadership Analysis

The approach that was adopted for this part of the study was to identify leaders who were enacting significant changes in regard to the adoption and implementation of new learning styles, such as active learning, cooperative learning, e-learning, and/or any other approaches that might have an impact on students' performance. This examination of leadership was undertaken with an understanding that creating change involves the ability to exert significant influence over others. This means, however, that for the purpose of this enquiry leadership efficiency was not restricted to implementing AL but also to the adoption of other learning styles which, in one form or another, could enhance students' performance.

In order to recruit suitably qualified participants for the discussion the researcher sought people who had demonstrated experience of new styles of learning (e.g. active learning, cooperative learning, and e-learning) with 25 lecturers from across the three campuses being invited to contribute to the project. They included a chancellor, pro-vice chancellors, deans, and departmental heads. Seventeen of these agreed to participate. Seven participants were senior academics at UQ university, six held senior posts at KS university, and the other four were from PN university. One held the position of Chancellor, two were Pro-vice Chancellors, five were deans, and nine were departmental heads.

Using survey methods described in Section 5.9 (above) the participants were asked, firstly, which learning styles they supported and whether those styles affected (either positively or negatively) student performance. In response, 60% respondents stated that they were challenging the status quo of using traditional methods of learning by encouraging teaching staff to move to more modern methods and new teaching styles that led to improved learning outcomes. One instance was provided a departmental head (LUQ1⁸) who explained:

"I am not against using traditional formal learning, but I believe that many subjects, such as Science, Mathematics, Engineering and many other such subjects, need to be delivered through other means such as AL... if not the whole subject ... at least the most important topics".

This participant perceived leadership as *"an effect"* and *"the ability to achieve organisational goals"*. Further, he considered that capable leaders *"are the cornerstone to the success of any organisation"*.

Another departmental head (LKS1) shared similar ideas about learning methods that could be adopted:

"It is not acceptable in this millennium to still be using traditional formal teacher-centred lectures ... many studies indicated that this style of learning (i.e. the traditional formal lecture) is a drawback to the learning process".

Furthermore, this participant considered that:

"Leadership is about facilitating individual and collective efforts to accomplish shared objectives".

The participating Chancellor (LUQ2) provided more details:

"When a university invites students to actively participate in the learning environment, the students then take more responsibility for their performance in the course ... they have an opportunity to make decisions about what they learn

⁸ Leader one from UQ university

and how they use that knowledge... students may see a course as more valuable and more directly related to their goals... therefore, inviting students to participate enables them to analyse, synthesize, or apply material ... it gives them a chance to learn more and to increase their understanding of the subjects”.

This participant explained that academic leadership is fundamentally the same as leadership elsewhere; leaders have to establish relevant, achievable, and appropriate objectives and goals for their organisations and work as facilitators to achieve those ends. He added,

“Our main goal in the university is students and their knowledge ... we are working in the university to make our students trained and suited to the needs of the nation’s labour market”.

This participant expressed the view that the main goal of the university is to educate young people and provide them with the knowledge and skills which qualify them for the labour market. However, this statement is at odds with the prevailing situation in Saudi Arabia. In their study entitled “*Would the Educational Programs help in solving Saudi Arabia’s employment challenges?*”, Alfawaz *et al.*, (2014) noted that there was (at the time of their writing) a high percentage of tertiary-educated Saudi females and males who were unemployed – and unemployable. They confirmed that over 70% of Saudi women with a bachelor’s degree were still seeking employment, thus illustrating a mismatch between the education system and global/Saudi labour markets. Consequently, one of the main objectives of the national *2030 Vision* is to improve the educational system and to make it relevant to the requirements of the economy and to society.

This is a worthy long-term vision, however, to be successful all other stakeholders (that is senior staff such as pro-vice chancellors, deans, and departmental heads) need to have the same vision and understanding.

A related concept of leadership was provided by Dean (LPN1) who explained;

“Academic leadership, in my understanding, is the process of moving people (lecturers, students, and all employees in the university) towards accepted goal(s)”.

This is one aspect of leadership whereby the leader, in effect, moves people towards accepted goals. However, effective leaders should seek to inspire followers to work “hard and smart” and in so doing to exceed both their goals and expectations.

Another participant, (Dean LKS 2), insisted on the importance of demonstrating in person what he expected of others;

“Moving students to achieve their best with, of course, full support of their lecturers is our main goal in the college. I like to lead when I encourage my colleagues (lecturers) to use AL in their courses ... I use this means (active learning) to deliver my courses”.

Educational leaders should shape the quality and level of educational standards and they can help elevate teaching methods by encouraging colleagues to adopt the latest technology in the field of education.

Writers and researchers have cited many qualities pertaining to leadership, and in response to this study one departmental head (LUQ3) asserted that:

“Honesty is one of the main characteristics that leaders should possess ... organisations and their employees are a reflection of the leader, and if he/she makes honest and ethical behaviour a key value then the team will follow suit”.

This participant explained that honesty includes not only telling the truth but also leaving the right impression. Therefore, if employees are sure that leaders are worthy of their trust then they are more likely to follow them.

One departmental head (LPN2) commented that another desirable quality for leaders who occupy senior posts, such as that of a dean, is the ability and confidence to effectively delegate:

“Delegating tasks to the department heads are one of the most important skills that leaders should possess ... highly controlling deans who are unable to delegate find themselves increasingly buried by operational issues that departmental heads could competently handle with ease”.

Leaders are responsible for creating positive work environments and for increasing productivity in the workplace, and one way for achieving this end is to delegate, and that entails trusting others. Leaders should not try to do everything and that is why delegation is important for efficiency and for the development of lecturers who are ultimately the ones responsible for implementing AL. Thus, delegation is essential for the introduction and application of active methods.

Related to the matter of delegation is shared leadership, and if conducted appropriately this could lead to enhanced student learning. However, the development of shared leadership is dependent on deans (and others in senior positions) adopting democratic styles of management, and this requires time,

patience, and well-planned strategies for developing lecturers as peer leaders (Senge *et al.*, 2015).

The quality of creativity was not always regarded as a key feature of leadership, but in recent decades innovation, imagination, vision, and the capacity to foster 'disruptive' ideas have emerged as desirable features in leaders and managers (Alomiri, 2015). So too, in the area of education creativity is being applauded. The ability to 'think outside the box', the development of original ideas, have emerged as critical factors for the continuous improvement of outcomes of universities (Tremblay *et al*, 2012), as evidenced by the following comment by a departmental head (LUQ4):

"creative deans provide the conditions, environment and opportunities for lecturers to be creative ... creative deans also seek to identify possible problems.... they scan their educational environment for issues which, if not addressed promptly, could prevent colleges from engaging in more radical change as they strive to prepare their students for the future ... creative administrators see these not as problems but as opportunities".

This view echoes the work of Clark (2009) who stated that creative leaders can be disruptive and surprising. That is, they may adopt solutions to problems and take steps that are unexpected: "They invent new solutions to challenging situations and use imagination and skills to apply relevant theory and concepts" (Clark,2009, p. 5). Because creativity is one of the main instructional strategies in active learning, creative leaders can be the most appropriate leaders for supporting the adoption of new and different teaching methods.

The educational vision and the priorities of most of the participants were shaped by pragmatism. That is, they focused on the future employment prospects of their students and how the students' skills and knowledge could best be developed to meet the needs of the labour market. While for some participants an educated populace is an inherently desirable objective, of more immediate practical concern is providing an education which has direct and immediate application.

One contributor (LKS3) expressed the view that commercial competition is a factor that determines educational objectives and content:

“if we do not prepare our students well to enter the labour market with high confidence to achieve their goals ... we then fail to achieve our goals and objectives of giving our students the necessary knowledge, skills, and competence”.

Consequently, the model of leadership that was adopted in the universities under study was characterized by pragmatism together with a strong vision - and a total commitment to that vision. And for most, the vision was of an institution which met the current technological, scientific, and business needs and priorities of the nation. Most participants perceived their vision to be within the context of the *2030 Vision* which was mandated by the government as the national-development framework. Interestingly, they didn't talk about it as a vision has been imposed on them; rather it was discussed as if was their own unique institutional objective. Therefore, the leaders could be characterized as visionary leaders; that is, individuals who could attract followers (lecturers) and inspire them to pursue a shared goal and to achieve objectives beyond ordinary expectations.

Another question asked of the participants was as follows; “which leadership style would work well in different situations”? Most were aware of the different concepts and philosophies of leadership, and it was generally agreed that university administrators vary their approaches according to their situation, and as a former chancellor (LUQ2) explained:

“There is no one best style of leading ... it depends on the situation ... leadership is a function of situational demands”.
He added:

“All leadership styles are people-oriented or relationship-oriented... but no one is better than the others ... all styles reflect a specific time and situation in which they will be most effective. Good leaders are those who select their leadership styles based on what is needed at the time, and what is the best tool for the job.”

The key phrase in this participant’s statement is “the most effective” which means to find the right people to do the job and to encourage people to perform beyond what they would normally be capable of. It also entails prioritising and allocating resources where the need is greatest.

Another related view was expressed by a dean (LKS4) who said that leaders should not have just one fixed approach, instead they need to be able to work in different environments with different styles:

“Leaders should match their styles according to the qualities and standards of their followers and according to the work to be undertaken”.

She added:

“I believe leaders who are unable to change their leadership styles according to the situation are not good leaders... therefore, leaders in the university need to be aware of the skills, abilities, maturity, and level of education of their academic staff.”

That is, the style of leader should be adjusted and optimized so that it relates to the professional maturity and experience of subordinates. Consequently, leaders need to be flexible so that they can adjust their methods to deal with various types of followers in different situations; as Aabed (2006) commented, according to circumstances a leader should be able to shift between any of four key leadership styles: telling, selling, participating, and delegating.

In regard to both the pedagogical implications and the methods of AL, leaders must be able to resolve any conflicts or differences that may arise amongst peers and staff. While some teaching staff hold positive views of AL others are uncertain, even hostile, and thus it was very important to ask participants about how best to deal with disagreements and discord. Most reported having experienced such situations when they implemented different projects such as AL and e-learning.

For example, a chancellor (LUQ2) described his experiences this was:

“The first time I wanted to introduce AL in the university I found it was so difficult to apply top-down decisions. Many lecturers were against using such a method (active learning) and I knew that top-down decision-making would not work at that time. So, I endeavoured to send many lecturers to professional conferences abroad where people would be talking about implementing AL and its positive impact on students. Many workshops about AL have since been held in the university, and I created an incentive system for those who adopted active learning. The result (for me) was amazing ... about 35% of lecturers adopt AL methods and then encouraged and helped others who were initially reluctant to use active learning”.

It was evident from such comments and experiences that training is a cornerstone to implementing new and unfamiliar methods. So, too, are encouragements, many

respondents (40%) referring to the positive effects of inducements for adopting active methods. One dean (LUQ5) reported:

“It is important to motivate lecturers by appealing to their self-interest and by providing incentives and recognition for their efforts ... these encourage lecturers and ensures that they achieve their objectives”.

This participant added:

“The university system and regulations have offered reward bonuses (or annual incremental salary increases) to lecturers.... But also, it restricted the incentives to a very small number of lecturers....it might be worthwhile for leaders to think about using this bonus for those lecturers who adopt creative ideas or new learning styles, such as active learning”

This dimension, a ‘reward system’, is considered to be a part of a transactional leadership style. According to Bass (1985) and Burns (1978) transactional leaders are characterized by a leader-follower exchange relationship whereby the leader satisfies the followers’ needs in return for satisfactory performance. The transactional relationship can be described as a ‘bonus scheme’ based on mutual benefits between the two parties. However, the main issue with this style is that it focuses on short-term commitments. Consequently, this form of leadership is said to be responsive to followers as it raises their level of need on Maslow’s (1954) hierarchy (Alomiri, 2016).

In summary, the researcher identified leaders who were enacting significant changes within their colleges and departments with regard to the adoption and implementation of new learning styles, and in particular active learning, cooperative learning, and e-learning. The participants were all leaders in their respective disciplines, and they aimed to prepare students to enter the labour

market so that the students exhibited high confidence as well as the competencies to attain their goals. To achieve that objective, they had introduced the latest technologies, which could be used for delivering their courses to their students. AL techniques have been one of the main projects Saudi universities have invested in across the tertiary system.

8.3 Training

Professional training programmes are considered as a key factor in implementing AL within learning institutions. According to Eison (2010) and Groves *et al*, (2015) research shows that inspiring and informed lecturers are the most important institution-related learning factors influencing student achievement, so it is critical to pay close attention to how we train and support both new and experienced educators. Therefore, providing training on how to use AL strategies can be considered as a cornerstone of adopting this style of learning for lecturers and students alike. Providing professional training programmes could have a major impact on enhancing faculty members' teaching capabilities. Consequently, universities need to develop procedures for the evaluation of their performance and training, thus ensuring an elevated level of professional skills and teaching competence.

8.3.1 Training Analysis

In this section, the researcher discusses the importance of professional training in implementing AL in Saudi universities. The seventeen academics who participated

in the leadership investigation also agreed to be interviewed regarding training issues. The attitude of leaders to the value of lecturers' professional development activities is critical, one participant commenting:

"I believe lecturers' development activities are critical to improve their teaching skills...it is the main means of implementing new projects such as active learning, cooperative learning and/or any other new style of learning" (LUQ6).

The participant added:

"The issue is that some lecturers are not interested in attending training sessions such as workshops and/or seminars within the university...they prefer to be sent abroad to attend such courses which in some cases is very costly and the university' budget cannot afford such courses".

Another participant, (LKS5), insisted on the importance of professional training before adopting and implementing active learning:

"We need all lecturers to speak the same language (that is, the same style of teaching) when they deliver their courses...to ensure that they use the same teaching methods, we need to provide professional training to all lecturers".

He added that *"...our lecturers have studied for their PhDs in different countries, so they have different backgrounds...staffs have received their PhDs from KSA, USA, UK, Australia and other countries. Also, we have many different nationalities... some of them have good experiences with different learning styles but others do not ... therefore we need to develop a policy which contains the learning style that should be used in each course and the professional training required by each lecturer".*

This means that implementing AL might not be included in all universities' policies, and in certain universities the implementation of AL is dependent on the initiatives of deans and departmental heads.

One dean commented that budget constraints were a barrier for providing the required professional training:

“I have prepared a professional training proposal including 120 hours annually for each lecturer just to educate them how to implement AL and its strategies in their classes... unfortunately the finance department approved less than 30% of the total amount which made us reduce the annual training hours from 120 hours to 40 hours... this is not enough if we want to have high quality training and good performances from lecturers” (LUQ7).

Another participant (LUQ4) had a different view:

“Learning styles such as AL, or cooperative learning, or other methods do not need formal training... it entails just attending some conferences about AL or reading one or two books in AL to understand AL correctly and implementing it accordingly”

Officially-approved training is important and is commonly requested by institutions and organisations. Moreover, understanding the topic to be taught is critical, as is a degree of uniformity of approach by teaching staff. This is a component of building institutional standards and processes which means that the university should adopt and implement training programmes for all teaching staff. Therefore, AL will probably not be implemented in response to initiatives by individual staff, but is more likely to be effective if it is an initiative of the senior echelons of the university.

In fact, some universities do not follow the “train the trainer” model. Universities could qualify a few lecturers for AL strategies in the top training centres worldwide, and those who attend such centres could, in turn, lead the professional training within the university. The participating chancellor (LUQ2) provided some details on

how to use the available budget to train their lecturers on how to implement active learning:

“A train-the-trainer model enables experienced lecturers to show less-experienced lecturers how to deliver their courses using active learning... less-experienced lecturers first observe a training event led by the qualified lecturer.... A train-the-trainer workshop can build a pool of competent lecturers who can then teach the material to other lecturers. Instead of having just one lecturer who teaches a course for a long time, you have multiple lecturers teaching the same course at the same time”.

This ensures that all lecturers receive timely training to deliver their courses according to university policies and procedures.

“University policies in Saudi Arabia are not well developed...they leave the desire for developing lecturers’ teaching skills in lecturers’ hands...there are no criteria for lecturers’ promotions other than how many research papers they publish. This approach is acceptable, but it needs to include some other criteria such as using the latest technology and implementing new styles of learning (i.e. active learning, cooperative learning, e-learning etc.) in their evaluation forms” (LKS2).

Therefore, at least based on this participant’s statement, implementing AL in some universities depend on each lecturer’s desires and on his/her acceptance of AL strategies. In these cases, AL is not included in institutional procedures, and this shortcoming highlights the need for clear, university-wide statements of policy. Therefore, some universities need to redevelop their policies in accordance with the requirements of the new educational environment.

Around 40% of the participants have pointed out that their university does not pay attention to the professional training of their lecturers and students:

“in checking the university’s training catalogue you will find nothing about active learning...a few courses are prepared in AL as a result of a personal effort from some deans” (LKS3).

This participant added that:

“Such courses are delivered to males but not females”.

This statement from the participant does not suggest unequal treatment of male and females; rather it means that there was a personal effort from some lecturers, not an institutional process or a planned training course approved by the top leadership as part of the university's strategy.

Another departmental head (LPN3) shared similar ideas about the importance of pre-planned professional training to develop lecturers' skills to enable implementation of AL consistently within the university:

“Some lecturers are very active...they develop their skills in different areas such as new learning styles and information technology”.

She added:

“There is a lack of training in general in the university...let alone training for AL....to improve yourself in the university you need to attend training and should pay for that...”

The professional competencies that faculty members require to implement AL correctly was investigated and explored to determine the areas where they needed training to assist them improve their teaching skills. The interviews involved some of the themes that were recommended in literature and by the deans and department heads in the selected universities. Participants mentioned areas such as teaching strategies (e.g. interactive teaching and student engagement, questioning strategies, conversation in the classroom, and problem-based learning), curriculum design (learning outcomes, course and syllabus design),

utilization of technology in teaching (enhancing learning by means of technology, use of social media channels for learning, designing effective PowerPoint presentations), assessment and evaluation (student evaluation strategies, performance assessment, projects, portfolio, test items analysis and providing constructive feedback, utilization of multiple choice items to test higher order thinking skills), thinking skills (scientific research skills, critical thinking skills, creativity and innovation), and communication skills (motivating students in the classroom, ethics of teaching, classroom management).

One dean commented that:

“a skilled professional training programme merges both theoretical and classroom practices to realize the intended learning outcomes ... lecturers should regularly attend training workshops associated with teaching strategies and student assessment to comprehend the students' learning processes and therefore to improve students' learning” (LUQ7).

He added that:

“It is very important to ensure that teaching staff in the professional training programmes are highly qualified and knowledgeable in the themes they are presenting”.

Another participant emphasized:

“The quality and efficiency of the training programme should be assessed systematically, and feedback should be provided so that the programme's targets are achieved” (LPN4).

It is suggested that specifically-designed training courses could be added to lecturers' requirements and should be considered as a prerequisite for promotion within the university.

In summary, professional training is a key factor in implementing AL within tertiary institutions. Furthermore, paying close attention to how we train and support both new and experienced educators is critical to ensuring that all lecturers are using similar learning styles within their respective universities. Providing training on how to use AL strategies could help the adoption of this style of learning for both lecturers and students, and it could have major benefits for enhancing faculty members' teaching capabilities. Furthermore, as lecturers in Saudi universities have studied for their PhDs in different countries and therefore have different backgrounds, it is important to develop a policy which clearly describes the learning style that should be used in each course and the professional training each lecturer needs to undertake that course.

8.4 Saudi Culture

There is a global movement in institutions of higher education to present new styles of teaching, the movement being evident in Saudi Arabia too. Consequently, many learning styles have been adopted and implemented, prominent among them being active learning. This is a new phase in the globalisation of education (Pagram and Pagram, 2006). However, numerous universities have implemented the new methods without considering the impacts of national culture on the acceptance or rejection of the methods. Hofstede (1980) stated that the cultural environment of an individual has an impact on the person's thinking, feelings, and style of working. Culture will also impact on the ways in which people interact when new methods are implemented. In this section, the impact of Saudi culture on AL

is investigated. To do this it was necessary to consider the perceptions and experiences of those who support AL implementation in universities and of those who reject active learning, the purpose being to identify any links between AL and national culture. The focus here was on two of the dimensions listed by Hofstede and Hofstede (2005); namely Power Distance, and Uncertainty Avoidance.

8.4.1 Cultural Analysis

When the researcher analysed the responses, it was found that the majority (more than 60%) endorsed the idea of introducing AL and other methods, such as e-learning and/or cooperative learning, in one form or another. Therefore, the concept of AL implementation within Saudi universities was supported. However, their endorsement of AL was conditional and confined mainly to the provision of ICT skills, use of the internet and its applications, and innovative thinking. Furthermore, it was accepted that AL would entail new facilities and equipment, that courses would have to be redesigned, and that group and class sizes would have to be adjusted.

Participants were asked, firstly, their thoughts about inequality in society. Interestingly, they expressed the belief that people should be considered equal in law only, and in this they accepted that inequality would exist in many aspects of life. This view was typified by one respondent, (LKS5), who explained that:

“making people equal is a communist idea, and it means lazy people get advantages that they do not deserve, and the active people are restrained from living as well as their capabilities would allow them”.

The participant added:

"Who said that people are the same?...males and females are different... how do you want us to say all people are the same...it is not a kind of discrimination but this is the reality...I am not saying males are superior or that females are... I am saying that if you contribute something (regardless of the kind of contribution or its size) you are considered worthy...therefore, I judge people by their contribution to their nation or to the world"

Another, (LUQ4), added that:

"People are different in what they provide to the local community, the nation and the world ...if they contribute positively to the local community, the nation and the world, they should be treated differently".

This participant further explained that the status of people in society is correlated with what they contribute. Another participant (LPN1) shared similar ideas:

"Certainly, people are different.... we should place people in their right position... we deal with senior (older) people in society differently from younger people regardless their ranks or grades... furthermore, higher ranks or grades are different from lower ranks or grades".

Lecturer LUQ6 stated that:

"Inequality, as a principle, is good for the society. It really is the engine that increases human momentum. Nevertheless, we should not look at everything in black and white. Inequality does not necessarily presume a lack of justice or of moral values".

A different outlook was expressed by LKS1 who commented:

"People should be treated the same...regardless what they are and what they provide...we have to deal with them as a human being.... but unfortunately, our parents and society as a whole accept inequality ... people need to be of value in our culture and to see it as a belief".

Lecturer LPN1 stated that:

“My generation and I do not accept this value and we are against it.... yes, we must respect the older people and our bosses but not treat them differently...we believe that all people are the same”.

This leads us to conclude that in Saudi Arabia power-distance is generally inculcated in families from an early age. A country with a high score of power-distance (such as Saudi Arabia) places emphasis on obedience and deference to parents and to those of a higher status, this being a requisite for the younger Saudi generation. Traditionally, in Saudi society, parents, teachers, lecturers, and neighbours, for example, were highly respected and listened to with deference. However, the new generations look at it differently and they do not automatically accept the *status quo*, and it must be noted that the majority of lecturers have studied abroad and lived in western countries where individual merit and effort are more important than traditional behaviour.

Participants were then asked if they could explain the decision-making process in their organisation. There was general consensus about the decision-making process in their institution whereby strategic and important decisions were taken through established channels, such as university councils, faculty committees, and departmental committees. Although some decisions might be taken individually, most important matters were resolved at the senior levels. LPN7 explained:

“most decisions are taken by official means such as faculty council ... but some decisions might be taken directly by the dean”.

Another comment was provided by LUQ1:

"We sometimes participate in the decision-making process.... it depends on the dean... I have worked with three deans over the last ten years...the percentage of participants in the decision process varied ... I believe they are responsible for their decisions at the end of the day".

LKS6 stated that:

"Most decisions in the universities are taken as top-down decisions... unless it has been mentioned somewhere in the policy which has been presented and approved by the university's council".

She added that;

"If the university's leadership is keen to improve the university's performance, they should let all stakeholders participate in decision making".

It is evident from the range of responses that major decisions made universities in Saudi Arabia (or at least in those represented in this study) are from the top down and that strategic and important decisions must be taken through approved channels. However, other decisions depend on individuals and their leadership styles, some being democratic, others consultative or autocratic. The decision to introduce AL across all departments on a campus would be of particular significance and would normally be made at the most senior levels; however, modes of implementation would usually be left to those at departmental/faculty level.

A third question was then asked of participants who were requested to describe their relationship with their current boss. They were asked to explain their relationship and to do so in just a few key words? Most participants (55%) described the relationship as good and respectful. For example, LB6 stated that:

"The boss and I are employees at the end of the day... we should respect each other...the only difference between us is that he has some more responsibilities".

Another comment from LUQ5:

"I think we are (the boss and I) mature enough to manage our relationship in the right way... we both know our limitations ... we distinguish between the social life and the work".

Others expressed different experiences, as LPN3 says:

"I do not want to create any problem with my boss... I always obey him for the sake of the work.... we should be honest with him and support him...I believe that the boss and I are in the same boat...although he will be questioned if he does, or does not, do the right things".

In the same manner LKS2 commented:

"From day one I have decided to deal with my boss respectfully...I knew that part of my future is in her hands...promotions and new appointments are in her hands... therefore, I have to satisfy her".

Although it is clearly stated in university policies how new appointments should be made and how promotions should be awarded, this participant (LB2) may have been unaware of the policies and continued to acknowledge obedience and deference to those of a higher status as a means of advancement. Power-distance refers to the degree to which power is apportioned within a culture and a culture with high power-distance has authority and influence in the hands of a few people who regulate the society from above rather than control being distributed throughout the population. Such a culture is characterised as authoritarian, and people are treated unequally in Saudi society, a situation which contradicts the belief that Saudi society has been shaped by its Islamic heritage.

'Uncertainty avoidance' is the second dimension that has been assessed; this refers to a society's tolerance for uncertainty and ambiguity. Participants were asked their preferred method of business management. Most participants (more than 65%) maintain rigid codes of belief and behaviour and are intolerant of unorthodox behaviour and ideas. For instance, LPN2 stated that:

"I prefer planning everything carefully to avoid uncertainty... I would prefer that the university relies on rules, laws and regulations ... to reduce its risks to the minimum and proceed with changes step by step".

Similarly, LKS7 said:

"Following a strict structure with rules.... formalized policies, procedures and clear system operational procedures can help the university achieve its goals and objectives".

Conversely, some participants (30%) believe that adhering to rules and regulations can inhibit creativity and innovation. LPN2 stated that:

"Although rules and regulations are important, or rather critical for helping organisations to determine their future...sticking to them (or relying on them) can be considered as a barrier to innovation and creativity".

The participants were questioned about change and whether changes are necessary and positive. In response, there was disagreement among respondents about change within organisations. Some participants (60%) supported changes (regardless of the merits of those changes) because they were dissatisfied with current arrangements. But about 30% opposed changes, preferring to maintain the *status quo*, though without offering any justifications. Of those who support change LUQ2 stated that:

"I believe that the change is necessary...maintaining the same things for decades is not the right decision...particularly in a business environment...as many know Nokia was one of the most successful companies in the 80's and 90's of the last century... where are they now?"

Another comment was provided by LKS4:

"It is difficult for organisations to avoid change, as new ideas promote growth for them and their members.... the change should be planned well before we move".

He added:

"Changes can create new opportunities, but are often met with criticism from resistant individuals within the group".

Participants who support changes were keen that top management should share ideas and suggestions with their staff before implementing any alterations to existing procedures. For instance, LPN3 said that:

"The university should invite input to ensure that everyone has an opportunity to voice their ideas and opinions. If, however, lecturers hear of a sudden change, and they had no input, they feel excluded from the decision-making process and perhaps resist the decisions".

She added that:

"Poor communication can cause resistance to change".

In light of such comments it is evident that senior management should, if they want the change to take place successfully, allow stakeholders to participate in decision making by giving them the opportunity to post their ideas, opinions, and suggestions.

On the other hand, there were some participants who opposed change in one form or another. Commented LKS3:

"Sometimes we do not understand the need for change...we believe that the current way of doing things works well...we have been doing it for years....it

works well...so they want to change just “for a change” ...without offering clear explanations or reasons”.

Another comment came from another participant (LUQ6):

“Sometimes, change in university necessitates changes in skills, and some lecturers will not be able to make the transition very well if they do not receive the right training. The university does not have a clear plan for training to ensure that the transition will proceed in the right way “.

These concerns might be justified. Top management should make their decisions clear to all stakeholders and they should respond to all questions by explaining what, why, and how they are going to make changes.

The next question asked of participants concerned how they deal with risks, regardless of whether the risks are foreseen or unknown. In Saudi culture there is a saying that “prevention is always better than cure”, this principle being endorsed by the majority of participants (more than 65%). Explained LUQ5:

“If we have rules and regulations in our workplace.....Then everything should work smoothly.... therefore, implementing the right rules, regulations, systems and operating procedures will not just minimize risk but will eliminate it”.
She added:

“The risk, however, can occur in one form or another... businesses that are most successful in dealing with threats build risk management into existing management processes”.

A similar comment was provided by LUQ3 who said:

“I have worked with a manager who had experience with risks and how to mitigate them... she believes that a manager should plan for the assumption that people-problems will occur and mitigate them ahead of time by putting in place techniques to manage relationships and communication. She is prepared for the unexpected and involves the team in the process”.

According to participant LKS1:

“We are paying very little attention to the unexpected risks....it seems there is a tendency in our environment to focus on familiar and measurable risks as opposed to those that cannot be predicted.”

In summary, as has been mentioned in chapter one, Saudi Arabia is characterized as high in both dimensions of national culture; power distance and uncertainty avoidance. As explained in the introduction, the approach used here was to interview those who support AL implementation in universities and those who oppose (or hesitate to implement) active learning. The purpose of this enquiry being to identify any cultural factors that influence those attitudes. It was clear from the results that have been presented above that those leaders who were high in power distance and low in uncertainty avoidance, intended to adopt AL: conversely, those who were low in power distance and high in uncertainty avoidance would not implement AL unless they were convinced by the features of AL and by the ability of AL to benefit learners. However, more investigation is needed about the influence on education of these two dimensions.

8.5 Conclusion

This chapter discussed the analysis and results of leadership, training, and Saudi culture and their impact on active learning. To achieve that objective, they had introduced the latest technologies which could be used for delivering their courses to students. The participants were generally supportive of active methods, though they had evidently experienced different leadership styles when seeking to introduce new instructional methods. They believe that there is no one ‘best’ style for implementing change; leadership, in their view, should respond to

circumstances and to the unique needs of each situation. They were all, to some extent, transformational and transactional leaders. They focused on individual considerations by allocating special attention to followers according to the latter's needs, at times acting as coaches and mentors. They also created incentives and motivational inducements in the early stages of introducing active learning, and these reportedly had a positive impact on encouraging lecturers to implement active learning. Furthermore, professional training programmes were seen as a key factor in implementing active learning. Providing training for all stakeholders on how to use AL strategies could help all teaching staff to adopt this style of learning, and it would have major benefits for enhancing faculty members' confidence and their teaching capabilities. Finally, Saudi culture is characterized as high in the dimensions of power distance and uncertainty avoidance, and it is shown here that these dimensions strongly influence whether teaching staff accept or reject the implementation of active learning. Analysis of the responses indicates that those who opposed AL (or who hesitated to implement AL) were high in respect of uncertainty avoidance. Conversely, those who were supportive of AL in one form or another were low in uncertainty avoidance and probably high in power distance.

Chapter 9: Discussion

9.1 Introduction

This chapter presents a discussion of this study of AL in Saudi Higher Education, the basis of the discussion being the perceptions of the lecturers and students who have experienced an AL environment. The use of social constructionism as a theoretical framework has allowed me to comprehend the participants' perceptions and to connect those perceptions to the national objective for elevated standards of higher education in Saudi Arabia. As a result, I utilised the participants' data to develop five key comprehensive themes, and this entailed taking account of their understanding of active learning, their insights regarding the advantages and challenges of AL, and the future of active learning. I used these five themes in the discussion in order to clarify the issues that influenced the lecturers' and the students' opinions. The main themes which emerge from the data are 'The Concept of Active Learning', 'Implementation and Support', and 'Active Pedagogy'. The other themes which emerge are 'Evaluation' and 'Development'. The following sections consider these themes.

9.2 The Concept of Active Learning

AL is relatively new to the university environment of Saudi Arabia, and so the transition to the new form of learning demands a clear understanding of the definition, the principles, the design, methods, and rationale for this new

environment. The three common categories of AL (listed above) are discussed in detail in Chapter Three, and to be effective all of the elements of AL have to be presented at the outset to lecturers and students who participate in this learning environment. General misunderstandings of the term 'active learning' as used in this enquiry highlighted the importance of all (both students and staff) having a clear common understanding of the definition. Similarly, some of the challenges faced by the participants were strongly related to the model utilization. Moreover, it emerged that providing a rationale and a justification for AL helps diminish resistance to any new change, and acceptance of a new educational methodology is firmly linked to a clear and unambiguous understanding of the concept of AL. The following sections discuss how the concept of AL involving the definition, the design, and the rationale, have affected lecturers' and students' perceptions.

9.2.1 Active Learning Definition

The use of the term AL (and the misunderstandings that arose from the use of the term) influenced the acceptance of this new learning strategy, this point being highlighted in Chapter 6 (see 6.3) and in Chapter 7 (see 7.2.1). The common definition of AL emphasizes the role of face-to-face instruction as well as close student-student and student-lecturer collaboration, yet this is not self-evident from the term. This study emphasizes the significance of students using and understanding the term 'active learning'. The experiences of the student participants cited here confirm that the use of the term 'active learning' would enable them to better understand the nature of this learning environment and to

be prepared to be involved in a learning style that is quite different from their previous teacher-centred classes. This conclusion is contrary to the view of Al-Ghamdi (2011) who argued that the term should be abandoned because of lack of clarity. Instead, it is proposed here that the term 'active learning' is appropriate although it requires a clear definition and a full understanding of its implications for student learning.

The term 'active learning' was not used to describe any educational programme in Saudi institutions until 2010 when Umm AlQura University applied it to several of their courses. An old institution in the West Province of Saudi Arabia, Umm AlQura University has rapidly developed AL for a number of its programmes. This change has been in large measure prompted by its links to international universities who have experience of designing and applying active learning. This uptake of AL methods has been influenced by the work of Fahlberg *et al*, (2014) who state that AL has a marked advantage because it offers a flexible learning environment. Nevertheless, AL methods are different for each course and each topic and so it is important for course designers to explain to students what AL would entail and how it would apply to them. Indeed, to avoid confusion and to provide clarity universities need to define AL, to explain its overall objective, and to illustrate how it is applied in specific subjects.

9.2.2 Active Learning Design

As discussed in chapter 6, in the institutions examined in this project the designs for AL courses were overseen by the senior management, teaching staff not being consulted. Taking into consideration the shortage of AL designs that can be followed by lecturers (Bahoirth, 2014), the initial selection of a design model by the administration was generally considered acceptable by teaching staff. I endorse the decision and believe that the process of the administrators choosing the design, at least in the preliminary stage, reduced the risk of an inappropriate course design being adopted by inexperienced lecturers. As shown in Chapter 6, few participating lecturers had prior knowledge of AL and even fewer had any experience of AL methods. Also, the task of selecting and preparing AL activities can be daunting, something many lecturers are keen to avoid. Consequently, this study confirms that the initial general design model selected by the administration had the benefit of easing the introduction of such a new form of education. It was not definitive, instead offering a flexible model of which could be modified to different circumstances and thus allowing more creative teaching. The flexibility of AL design is recognised in many studies as one of its strengths and it has been confirmed as an enhancement to learning. This outcome reflects the results of Zahrani's survey (2012) that the flexibility of the active design allowed the lecturers to achieve course learning objectives more readily within an active course than within a traditional course.

However, using one over-arching design model for all courses affected the participants' perceptions, and as explained in Chapter 6, the outcomes of this study show that the participating students and lecturers had concerns about the application of AL to some subjects. For instance, the English language lecturers found that the design model selected by the college was not useful for their courses. They reported on the need for close, on-going interaction with their students in introductory English courses, yet they found that AL reduced the time available for such involvement. This result supports the comments of Joseph *et al* (2018) who found that for Masters students' at US universities AL was useful only for selected courses. However, it is very likely that the model of AL which was provided to students influenced their opinion. In most models face-to-face time can be devoted to practical activities while class instructions can offer theoretical materials, as in the case of the Metropolitan State University of Minnesota which adopted AL for most of its courses.

One outcome of this project is that AL designs should be modified so as to suit each subject and each topic. That is, the design for AL should take account of the percentage of time for in-class instruction, the elements of AL methodology to be adopted, and the objectives of the course. Nonetheless, in order to retain the advantages of active instruction Andrews *et al*, (2011) point out that most studies confirm that there is no single 'best' formula for reducing formal class instruction or for increasing AL methods. Moreover, it is evident from the participants' comments cited in Chapter 6 (see sections 6.5.2 and 6.8) that the skills and

experiences of lecturers influences their views on the criteria for active course design. Also, design flexibility of AL has to be guided by experienced staff to be effective.

9.2.3 Active Learning Rationale

Globally, universities adopt AL to address numerous challenges, in particular for elevating student performance (Armbruster *et al*, 2009), and this was certainly the motive for Georgetown University in the US adopting AL methods. This is the justification for Saudi universities doing the same, but in this latter case they face the challenge of a lack of qualified lecturers to deliver AL to large numbers of undergraduate students. As noted, two of universities under investigation in this study had made the decision to use AL despite the initial difficulties of implementation.

Regardless of the evident benefits of AL it is still necessary for administrators to expound its positive features. Garrison and Vaughan (2007) noted that traditional campus-based institutions have long seen the problem of learning in terms of reaching and helping more students, but despite that acknowledgement they have often been slow to embrace change. From their experience, the teaching participants in this research project recognized numerous advantages of AL; for example, enhanced educational development, staff-student interaction, and course flexibility, and these are reflected in the findings of other researchers (Yudko *et al.*, 2008; Vaughan, 2007; Owston *et al.*, 2006; Kaleta *et al.*, 2005). The

positive perceptions of the students towards the availability of course materials are similar to that found by other researchers such as Dunlosky *et al*, (2013), Graham *et al*. (2005), and Garnham & Kaleta (2002). Indeed, the adoption of a system whereby students can more readily review course-work and communicate with lecturers assists the students to experience a better learning environment.

9.3 Implementation and Support

Lecturers and students of this study highlighted the importance of support if AL is to yield a positive AL experience. That is, support for using teaching and learning tools and for employing effective teaching and learning strategies. The perceptions of the participants in regard to the implementation of AL are discussed in the following sub-themes: orientation, support, and training.

9.3.1 Orientation

In respect of the concept and practices of AL, this study found a low level of knowledge of these among both students and staff in three Saudi higher education institutions. Perhaps the main challenge to be considered in Saudi universities is the adaptation of AL within this conservative culture which has long used a traditional didactic environment. Implementation of AL demands a quite profound re-orientation of courses and methods. The initial phase of implementation entailed the re-orientation of staff attitudes and teaching methods. In one university under investigation, a brief manual explaining how to use the AL 'tools' was distributed to the students who were new to this system, and staff members of the college were

available at times to provide technical assistance. Nevertheless, the results showed that some students did not derive advantage from the support services that were provided, one reason being that some students did not know where to go for assistance. It was apparent that the provision of well-documented guidelines in addition to verbal instructions would facilitate students learning and avoid poor performance, especially in regard to technical problems. This accords with the work of Al-Otaibi (2012) who found that students' experience of AL was enhanced when provided with a thorough orientation and a user-friendly virtual learning environment.

As shown in Chapter 6 (see 6.10), many academics reported that they found the new methods too challenging and too much work, instead preferring to retain their formal lecturing instructional techniques. Regarding the lecturers, a thorough orientation concerning the concept of active learning, learning theories, and technological tools is required. Five lecturers who did not use the AL model declined to participate in the interviews, according to one of the participants, their refusal apparently being an outcome of their inadequate skills rather than a disbelief in the effectiveness of active learning; it was seemingly a way of avoiding the further workload of transferring to active courses. When people do not understand their role in a changing environment, they feel that they are losing control and so resist change. However, such resistance may be reduced by showing the advantages of teaching active courses during a thorough orientation.

Another challenge that could be addressed by additional guidance was the lecturers' concern for applying AL within large classes. The participants expressed concern about the number of students to be accommodated in active courses and how they could facilitate and evaluate student engagement and interaction. Consequently, they requested a reduction in the size of classes. However, this contradicts the findings of a Turkish University which argued that a reason for implementing AL was to provide a better learning environment for large groups of students (Aksit *et al*, 2016). However, the difference there is that Turkish lecturers were aware of the goal of using AL for large classes, and so their concern was about the choice of methodology; for example, the practicability of incorporating discussions amongst large numbers of students. Furthermore, the participating lecturers in this study viewed this challenge from just one angle because they had a non-flexible course design, with discussions being a compulsory activity for course grades. This situation highlights a key aspect of education that is linked to flexibility in teaching strategies and to the design of active courses. Whether universities adopt AL for reasons of pedagogy or for financial viability, academics have differing opinions - particularly in regard to student numbers. Finally, it is the lecturers who face the task of delivering academic work, not the administrators, so they should have the right to redesign their courses - or at least be involved in the redesign process.

9.3.2 Support and Training

AL requires on-going support and training for students and lecturers. This study found that providing AL where it has not been implemented before calls for support and training programmes for all concerned. As this study was conducted with undergraduate students, it became apparent that the teachers generally considered that for AL to be effective the students need to become self-motivated, self-disciplined, and independent learners. AL means that the students are not passive – they are the ones who learn by being active, and so it is that students may need to be shown how to take control of their own study programmes. The lecturers, too, identified their lack of IT and teaching skills required to adapt to this new teaching environment. Based on the findings of this enquiry, the following sections discuss the skills required of both students and lecturers of active courses.

9.3.2.1 Student Skills

AL is an approach that stresses that students take responsibility for their own learning, but as described in Chapter 6 (see 6.9) the participating lecturers emphasised that one challenge arose from the poor technical skills of some students and the dependence of those students on others. That high level of dependence was evident in the failure of some students to develop skills and habits of independent study. A few of the students did not have skills that enabled them to research and compose their projects, instead looking to peers for aid. Though such situations are uncommon, in order to afford equality amongst students it is essential that personal responsibility for independent study be stressed at the

commencement of AL courses. This is all the more important because in many Saudi secondary schools the students are fed all the prepared information, they need to pass examinations and so are not required to act independently. Moreover, in the modern educational environment IT skills are crucial, and those with poor skills may require special support (at least initially). At present there are some undergraduate students who may not have acquired either study skills or IT skills before entering university, and as cited in Chapter 7 (see 7.2.2.1) one student admitted, *“I was not used to the computer before joining active courses”*. However, while a sad reflection on the current standard of secondary schooling, such scenarios are likely to disappear as more individuals and families acquire home computers and as more schools become better equipped. Indeed, it is expected that computer literacy will in future become mandatory, and the Ministry of Education is committed to offering computer courses and providing infrastructure during pre-university education. Additionally, innovations in educational tools are predicted to be further developed. Therefore, offering students preparatory programmes for AL will provide the required IT skills and knowledge that will suit the future development of active course design.

The findings of this research confirm the results of Gao and Hargis (2010) who noted that students need to improve their technology skills in order to participate fully in AL course – but the corollary is true too; that is, AL courses strengthen IT skills. These findings are also consistent with the work of Oliver and Herrington (2003) who stress the influence of students’ technical skills on their learning

experiences and on their level of satisfaction. Oliver and Herrington (2003) assert that an independent learner needs a comparatively high level of technical skills to reduce possible technical problems in the learning experience. In contrast to the results of Giannini-Gachago and Seleka (2005), most of the participating students in their project did not express any concern regarding the additional time requirements entailed in active learning, for instance the time required for quizzes. The findings detailed in Chapter 7 show that some students were affected negatively by their earlier secondary-school education in which they experienced formal teacher-centred learning. Those experiences had not adequately prepared the students for the independent, self-managed approach required for AL. The lecturers lamented that some students were not adequately prepared to work as independent learners in tertiary AL courses; as Lecturer LUQ8 commented, *“It is not good that a learner starts AL courses without any training”* (see Section 6.7). This is similar to the comments of Al-Jarf (2005) who noted that some new students did not take active instruction seriously because it was not used in schools and was not always used by other lecturers and students at the college. She emphasises that taking active instructions seriously also needs an adequate level of student self-discipline and the development of sound habits of study. These features are not typically found in new students, but they are requirements to succeed in active courses. Therefore, it is essential to offer such students preparatory programmes that help them to develop their study skills. It is apparent from these findings that preparatory AL programmes would greatly benefit new undergraduate students because they would ensure suitable levels of student skills,

study discipline, and class responsiveness. Moreover, as suggested by the participating lecturers (See Chapter 6, Section 6.4.1), the benefits of AL should be extended to post-graduate courses too. These results reflect the conclusions of Zahrani, (2012) and Fahad (2013) that there is apparent awareness of the requirement for independent learning, a central tenet of the active method, where strong commitment to disciplined work habits is so important. Supporting this outcome, Huang and Zhou (2006) propose that boosting students' self-regulated learning is one of the objectives – and one of the benefits proposed by lecturers and instructional designers.

Another factor which influenced students' perceptions and experiences was the research environment for females. For instance, access to university libraries by females has been (in most tertiary institutions) highly restricted and so libraries are not part of the female students' study life. These restrictions are compounded by the teacher-centred method which most has experienced, and which inhibit the development of independent learning skills. Most undergraduate students go to their campus only to attend courses, and infrequently use the library - a sign of the lack of prior research practice in undergraduate studies. This highlights the requirement for a better research environment involving a research-skills development programme. The development of digital library resources is one means of addressing gender segregation, but students still need to be trained to use the on-line resources; moreover, on-line literature is not a satisfactory

substitute for face-to-face interactions between staff and students, and that is one of the features of AL.

In brief, most students who had acquired suitable IT skills showed that they had performed well in their active courses. This study highlights other factors that impact students' perceptions and performance in AL, and they involve time management skills and a suitable level of self-discipline. Developing and maintaining appropriate research skills will also affect the students' readiness to succeed in active learning.

9.3.2.2 Lecturers' Skills

Active learning relies mainly on the use of modern interactive technologies, and while most participating lecturers had adequate IT skills and were keen to develop them, others were relatively computer illiterate and thus resisted teaching active courses (see Section 6.3) and as lecturer LPN1 commented, *"I feel ambivalent ... I do prefer traditional teaching"*. It was also stated that lecturers with low IT skills used to rely on assistance from technical support as well as from colleagues. It was really a challenge for them to develop their IT and active skills while teaching such courses, and it emerged that a lack of IT and active skills caused teaching resistance among the participants in this study. This conclusion confirms the outcomes of Bahoirth (2014) that perceptions of the relative merits of AL are influenced by the IT skill levels (and the confidence) of lecturers.

The lecturers who conducted courses by AL methods typically reported a rise in the time they spent learning new techniques and skills, and in moderating students in AL environments. Fundamentally, the lecturers of active courses had to devote more time to developing course materials than when they conducted traditional lectures and teacher-based courses. As reported above in Sections 6.10 and 6.11, some teachers explained that they had insufficient time for preparing activities; commented lecturer LKS10, *“AL gives me less chance to provide content”*, and LPN12 said, *“AL is helpful, but in practice it is difficult – even impossible - for several reasons such as ... the work load of lecturers”*.

Furthermore, the use of passive digital resources, such as PowerPoint slides, probably affects the experiences and opinions of both students and lecturers in regard to the appropriateness of AL for some themes. PowerPoint may use technology, but it is not interactive and is of limited application in active courses. Consequently, lecturers need to be trained on the appropriate use of presentation tools (such as PowerPoint) and on more advanced courseware tools such as Course Lab. Indeed, training programmes should be on-going in order to stay abreast of the rapid development of educational tools. This accord with the comments of Groff (2013) who stresses the importance of lecturers supporting course redesign and acquiring new teaching and technology skills. Teaching staff may need help to review and redesign their subjects, to define course objectives, develop appropriate activities, and decide what can best be accomplished in the classroom and how to mix the learning environments.

Furthermore, the level of pedagogical skills needed for teaching active courses has an important effect on lecturers' satisfaction and on the AL experience for students. This study demonstrates that some academics comprehend the importance of using techniques that encourage students' interaction and engagement, but others are unaware of the value of methods that facilitate interaction. Fong and Wang (2007) mention that lecturers have to regulate their schedules to accommodate regular interactions with students, but in this enquiry no participants commented on changing their schedules in order to devote more time to personal contact with students. To the contrary, most of the participants were more concerned with the tasks of managing large classes and evaluating their students' participation. This conclusion agrees with other studies which have found that timetables and time constraints are proving to be challenges for lecturers of active courses (Islam *et al*, 2015). Consequently, a conclusion here is that university administrators should take account of this issue to reduce the number of students per class and also, they have to provide time management resources and workshops for teaching staff. As discussed in Section 6.3, the participants reported that there has been considerable misunderstanding surrounding the introduction of AL, many teachers being unaware of AL and the implications for their work. This highlights the need for professional development programmes which would assist with course design, evaluation, and teaching strategies that entail active methods. Umm AlQura University has already realized the requirements for enhancing teaching skills and has offered staff the opportunity to participate in a skills-development programme. The programme involves two-weeks of face-to-face class time, and lecturers who

have registered for the programme have been trained via an active format. It appears that the use of an active format in training is in itself a demonstration of the methods and benefits of AL, and it also allows lecturers to develop their own skills without adding to their teaching and research tasks. Moreover, the programme enables the lecturers to experience AL from the point of view of students. It is expected that the use of active methods when training lecturers will be evaluated, refined accordingly, and expanded. The benefits of using active techniques for training staff include the elevation of learner satisfaction, and the capability to easily updating active methods.

9.4 Active Pedagogy

AL as an over-arching educational approach is still relatively new to Saudi higher education institutions. As detailed in Chapter Two, several institutions have started to provide professional development workshops on active learning, although only a few of them include pedagogical theories, instead most concentrating on introducing AL tools. This situation has been confirmed by Fahad (2013) who pointed out that the theoretical and pedagogical foundation of AL is very rudimentary, with much of the emphasis of the training still being on the technical level. This issue needs further consideration with a better comprehension of how to employ a suitable theory or model of AL within an active pedagogy. This point has been mentioned by Saadeh *et al* (2011) who contend that models provide a framework for educational methodologies, and thus they provide a basis for good instructional design and for the development of interactive and efficient coursework.

The participating lecturers viewed AL as a method for boosting the positive effects of teaching and learning, though they did not give much attention to the pedagogical implications. Similarly, the students did not have firm views on the pedagogical aspects of AL. However, the analysis confirms several factors that are related to the pedagogy of AL: course development, the pedagogical challenges of class time constraints, and comprehending the new role of the lecturer and the students. These two factors are discussed in the following sections.

9.4.1 Course Development

The process of redesigning courses so that they include AL methods has to be supported by pedagogical principles and suitable frameworks, and these should take account of the objectives of the course curriculum. Determining the suitable activities for course contents is a key step in the course-design process. As the lecturer-participants of this study were required to follow a specified design model determined by their respective college administration, their task in the re-design process was limited to deciding the course content that matched the elements of the design. Zahrani (2012) mention that lecturers support for course re-design is rather confined to identifying the objectives and outcomes of each course, though they may have limited choice as to methods of delivery. Support from an instructional designer is highly recommended for a course redesign process. Lecturing by way of the teacher-centred method used in Saudi Universities has shaped students' perceptions negatively, and it highlights the value of face-to-face class time. This outcome similarly supports the literature results that indicate that

formal lecturing still has a place in higher learning, but it needs to be complemented by AL which has the value in boosting student motivation and engagement (Michel *et al*, 2009; Trowler, 2010). It emerged that the participating students understand that AL offers an interesting alternative to the routine of the traditional learning environment. Lecturers have to be aware that students who are surrounded by the digital world are no longer motivated or satisfied by traditional teaching approaches. Another important challenge for today's lecturer is that many students are already sophisticated in communicating through social networks and thus are usually fully aware of what is happening in their university courses and university environment. Lecturers need to appreciate their students' perceptions of class activities and to understand the significance of the shift to student-centred techniques. This study also reflects the views of Froyd and Simpson (2008) and Thomas *et al* (2015) that promoting student-centred learning, encouraging independent learning, and maintaining constructive and suitable feedback is a challenge for their students. In this study, using face-to-face time for lecturing without enough discussion was one of the reasons for diminished student engagement in class time. The use of discussions in face-to-face class time during active courses was observed as an important factor for the design of active courses (Eddy *et al*, 2015). It is hoped that the future development of active course design would include this method as a means of elevating student motivation and engagement during class time.

Furthermore, the lack of published syllabi and rubrics has been recognised as a negative influence on students. A curriculum or syllabus is a statement of the

contents of a course (or subject), and a rubric is an example (or sample) of a piece of work. By providing both these a student can have a good idea of what a course is about and what is expected of him/her; and conversely, in the absence of a syllabus or rubric the student is ignorant of the course, its content, and its standards. However, course outlines were not provided by most of the lecturers, and rubrics are not common in the Saudi traditional learning environment. Likewise, methods of assessment were not always clearly explained at the commencement of each course, and discussion as an assessment tool was not favoured by most of the students, who perceived it to be too subjective and vague.

Additionally, the lack of guidelines by which lecturers could structure discussions was a particular challenge because lecturers were conducting group discussions without really knowing how they could be organised, structured, or evaluated. The use of discussion as an assessment tool has not been approved by universities and so there are few guidelines that could assist them to manage this part of AL. In many Arab countries, including Saudi Arabia, until recently there has been a lack of critical attention to this issue of course design and management. In 2003 the United Nations Development Programme highlighted the poor quality of education in Arab higher education institutions, pointing out that many of these institutions did not provide effective frameworks to improve the quality of academics, and nor did they adequately define required teaching capabilities (UNDP, 2003). Factors cited as contributing to the poor quality of education included a lack of clearly-defined vision (including a vision for AL), and the absence

of well-designed policies regulating the overall educational process. This need has been highlighted by Henard & Leprince-Ringuet (2008) who recommended that teaching-quality standards should be met by all academics, and that included the use of different forms of assessment for such AL methods as discussion. However, in Saudi's 2030 vision, decision makers seek to identify the general directions, policies, goals, and objectives of the Kingdom. Furthermore, they will provide a modern curriculum focused on rigorous standards in literacy, numeracy, skills and character development.

9.4.2 Lecturers and Students' Roles

One of the serious challenges that has been encountered in this study is the need to define the new role of the lecturer in active courses. Lecturers of active courses have to negotiate the shift from a lecturer-centred to a student-centred environment, and in so doing to encourage interaction and cooperation between peers. Since high engagement and motivation are signs of a fruitful learning process (Dislen, 2013), the lecturers need to identify what it means to be a facilitator to encourage student engagement.

Pedagogy entails processes of change, and that includes changing the lecturers' role to one focussing on student learning. This was one of the challenges described by the participating lecturers, a point emphasized by Brame (2015) who commented that the practice of AL is not as simple as the concept may imply. The way of teaching in Saudi Arabia used to be, and still is to some extent, focused on

traditional way of teaching. It does not give a consideration to the importance to the discussion and conversation between teachers and students to enrich students' knowledge and experience.

The pedagogy of the teaching of thinking skills needs a new role for the lecturers. It was perhaps the lack of experience in active teaching that affected the lecturers' capability to identify their new role. The role of the lecturers in active courses includes using strategies that encourage interaction in learning, providing feedback to students, integrating face-to-face instruction with active instruction and evaluating the instructional strategies based on students' views.

The lecturers expressed their positive perception of using active discussion as a tool for facilitating communication and interaction. Yet, interactions that facilitate significant thinking and reflection were seldom experienced in this study. This is affected by the traditional Saudi educational method in which knowledge is offered in a one-way system from lecturer to students. Freire calls this "the banking model of education" (Freire, 1970). This reflects several Saudi research results (Mahri, 2017; Youssef, 2016) that there is a lack of adequate guidance and feedback to students in traditional teaching. Converting from a lecturer-centred strategy to a student-centred strategy needs lecturers to identify their new role in developing skills for critical thinking by enhancing dialogue in education. Adding to the work of Greatbatch and Holland (2016), it is the quality and value of interactions that affect the worth of the learning experience in higher education. Active discussion can

efficiently support learning when lecturers offer regular feedback and when students share new ideas. Nevertheless, lack of feedback affected the students' view of their discussion experiences. A preferable practice in the teaching of active courses would entail enhancing critical thinking and facilitating collaborative learning, a point stressed by Nkhoma *et al*, (2017).

In the AL environment students are expected to accept a new role as independent learners, but being an independent learner does not imply solitary study; rather it involves engagement, participation, and collaborative activities. The challenge that the participating lecturers faced was how to assist students to comprehend and embrace their new role in the AL environment and to address any resistance. In particular, the re-designed pedagogy accepted by the lecturers has a strong influence on how students play their role in the AL setting. For instance, when lecturers posted specific themes for the mandatory discussion they were criticized by the students as the themes were limited in scope and did not encourage students to express different views. The students' responses and interactions were of the same kind and yielded little feedback from the lecturers. This has led to diminished motivation among students because of reduced interactions. Whereas the lecturers were responsible for designing the learning activities (for example, choosing the themes of the discussions), which will make students playing an active role in this dialogic activity. From a pedagogical standpoint, Conole (2008) says that designing learning activities is important to make more efficient use of

technologies. In any learning activity students have some tasks which are categorised by Conole (2008) in the following way:

“Communicative (dialogic activities, e.g., pair dialogues or group-based discussions), assimilative (attending and comprehension content), information handling (e.g., gathering and classifying resources or manipulating data), experiential (practising skills in a particular context or undertaking an investigation), adaptive (use of modeling or simulation software) and productive (construction of an artefact for example a written essay, new chemical compound, or a sculpture). (p. 201)”

One finding from this project is the benefit that arises from discussion and dialogue. As noted above (see Section 7.2.3.2.2; see also 7.2.3.2.5) students have always learned from peers, one commenting, *“I gain a deeper knowledge when I have a discussion about any subject with a partner or in a small group in the class”* (SPN8). However, AL commonly entails the use by teachers of structured discussions on specific topics, but these have not always been adequately handled or organised.

The challenge that faced the student participants was that they had no prior experience and thus no comprehension of their role in the active courses or of the tasks expected of them within the active environment. Therefore, students require assistance and guidance if they are to benefit from the new learning environment. It was obvious that the lack of instructional scaffolding in the discussions was one of the reasons for poor collaboration between students. Muhonen (2018) found that dialogue has to be supported by mentors who challenge and structure the students' learning. Consequently, it is strongly recommended that lecturers use

activities that elevate interaction, reflection, and collaboration by means of pedagogical guidelines. Some studies (Kennedy-Clark *et al*, 2017; Zakaria *et al*, 2016; Eady & Lockyer, 2013) emphasise that scaffolding is an efficient teaching strategy that supports student collaboration and can assist better teaching and learning in higher education. Xia *et al*, (2013) also emphasise that discussions increased reflection and collaboration, a point identified in this study. Facilitating collaboration in discussion needs particular tasks assigned to groups of students. Thus, students understand their role in the AL environment the discussions can be more effective.

Furthermore, a participatory method could be employed to develop motivation and collaborative learning. The use of participatory methods lets students decide about their own learning (Virtanen *et al.*, 2017) and share knowledge and experiences. Indeed, in AL one role of the lecturer is to act as a facilitator; that is, one who does not provide the answers but who guides learners to discover results and make their own conclusions. An individual who makes his/her own discoveries is more likely to learn and remember the issue and the topic. Allen *et al*, (2002) emphasise that the success of the participatory method is affected by the cultural context. Participation does not take place in a vacuum, but its growth and progress will be affected by a diversity of factors inherent in the context (p. 46). Allen *et al*, (2002) show that the participatory method helps learners to socially construct their knowledge, and that, in turn, may lead to enhanced understanding and to changes in behaviour.

The application of AL concerns not just the way in which lecturers teach; as shown in Chapter 6, it entails a fundamental shift in the behaviour of students and the ways in which they learn. Changing learners' behaviours was a challenge recognised in this study, and this was probably an undesirable outcome of the experience of the prior teacher-centred strategy in which students are 'passive' learners. For instance, four of the lecturers used the participatory method in the discussion. Students were able to select to participate or not in a bonus discussion and could select the theme for discussion. This caused a number of posts by students, but the feedback from their lecturers and the student-student communication was very poor. Because of a lack of effective dialogue some students showed that there was a reduction in their motivation. This conclusion highlights the core of the lecturer's role as a facilitator to boost student's engagement and motivation.

Formalised lectures are not in themselves a poor way of imparting information and knowledge, but the point of AL is that activities can complement and strengthen learning; the point being that people learn (and remember) more by doing than merely by listening. Learning can be more effective by activity than by passivity. However, implementing active courses needs pedagogy to be linked to current styles of teaching. Participating lecturers did not have experience in AL prior to the implementation of active courses, and it is shown in Chapter 6 (see 6.3 and 6.6.1) that this influenced the quality of instruction in the active courses. To offer beneficial active learning, the adoption of relevant pedagogical theories should be

deemed as significant as providing appropriate instructional tools. Supporting this view, (Hood Cattaneo, 2017) notes that some pedagogical problems with AL still need to be resolved. In this study, the active pedagogy lacked the integration of face-to-face instruction with active instruction, a factor which influenced student engagement. The gap that has to be filled is the link between activities and class lectures. For instance, some lecturers practiced the integration of lectures and activities in the expectation that it would boost students' motivation and engagement, but a few did not discuss activities in class. Additionally, some of the themes in discussions were not related to the contents discussed in class, and the apparent irrelevance of the themes seems to have reduced students' engagement. Al-Mehdawi (2013) and Youssef (2016) state that lecturers need to employ proactive and responsive strategies that support and guide learning, maintain an emphasis on the topic, monitor progress, and encourage reflection and analysis. Learning in two separate environments (active and passive in-class) without proper integration is perhaps a reason for poor student engagement.

Moreover, interactions should not be reliant on the use of discussions only. There are many social networks that engage the 'internet generation', and the adoption of social networks in an online environment can be a very effective complementary tool for use in AL. It is not necessary for teachers to invent new learning tools; it is more economical to use existing systems such as the popular new communication websites. New technology tools can be used to boost interaction in active learning; for example, wikis may be used to enhance social activity and motivate new

students. Most new-generation students use social software and networks such as Facebook and Live Messenger that support the Arabic language. The efficiency of using blogs, wikis, and Ning's in higher education has started to be examined in the literature. Darwish & Lakhtaria (2011) illustrate that new AL can take place via podcasting and social networks that use blogs and wikis, technologies that are adopted readily by the 'Net' generation of students. Commonly used for non-academic purposes, these tools can be (and are being) harnessed for serious learning. Nevertheless, integrating AL with traditional learning would include learning new teaching skills and using new methods of delivery, a key finding of this enquiry, and one which has also been noted by researchers such as Bukoye and Shegunshi, (2016), Clarke (2013), and Saeed and Zyngier (2012).

9.5 Evaluation and Quality of Learning

Evaluation that is founded on students' and lecturers' experiences would generally lead to elevated educational outcomes. Supporting this opinion, Al Atef (2013) assert that AL models should be developed according to local, community, social, and organisational demands.

9.5.1 Feedback

As explained above (see 7.2.3.2.4), the giving and receiving of feedback is a core element of modern education, and certainly a feature of AL. A quality experience for students is an aim of most institutions and universities. Most universities examine students' learning experiences (Kandiko & Mawer, 2013) and their

feedback is the major data source for quality affirmation processes relating to teaching. In Saudi Arabia, the three universities under investigation now ask students to complete course evaluations as part of lecturer's assessments. For example, in 2009 King Saud University, and in 2010 Umm Al Qura University, commenced issuing evaluation forms to students. Though lecturers are allowed to access the reports, there is as yet no sign that the lecturers use these evaluations to improve their courses. Hence, in future there have to be well organised strategies by which the evaluations can be translated into improved methods and standards of teaching.

Furthermore, lecturers' performance in the new environment is now being evaluated by the administration. Feedbacks from lecturers about their experiences and about the challenges they encounter are provided each semester. Apparently, these have yielded positive responses from the administration in regard to the use of AL by lecturers. Administrators have incorporated lecturers' feedback on training packages that they provide in workshops and training sessions which have made useful development in lecturers acceptance to AL implementation.

The lecturers' experiences confirm the findings of Lionarakis & Papademetriou (2003) who demonstrate that in addition to the work of the lecturer the quality of the learning experience in education is strongly shaped by the nature and level of administrative support. Regular evaluation using students' and lecturers' feedback helps in refining each programme and in elevating the quality of the learning. Saudi

higher education recently works on regular assessment of student and lecturer satisfaction as the best strategy to explore learning efficiency and to confirm the on-going improvement in the standard and quality of instruction being provided (Saudi higher education website)⁹.

9.5.2 Development

AL includes independent learning, which calls-for high level practical skills (Scott, 2015), the ability to use new tools such as social networks that promote interaction and collaboration and reduce isolation. Thus, continuous development of tools and activities used in AL would meet the 'Net' generation's expectations. Simultaneously, lecturers need to be capable of handling possible challenges (such as technology failures), to comprehend the role of facilitation, and to make greater use of student-lecturer interactions. All of these functions are needed to help in developing AL programmes and to confirm quality of learning.

So far there is a general absence of policies or guidelines for active learning, yet such documents are vital for assisting teachers comprehend what is expected from them in the new environment. The implementation and future development of AL requires lecturers themselves to be taught, and for that reason I propose the establishment of an AL Centre that would help and approve active methods and course designs that could be adopted by teaching staff. Such a centre could provide criteria for the design of active courses and for advising teachers about

⁹ <https://www.moe.gov.sa/ar/Pages/default.aspx>

aspects of AL. This study suggests that an AL pedagogical model is needed, one that could be adapted according to the needs of each lecturer and each course. The following section debates the proposed AL model as a contribution to the research of active learning.

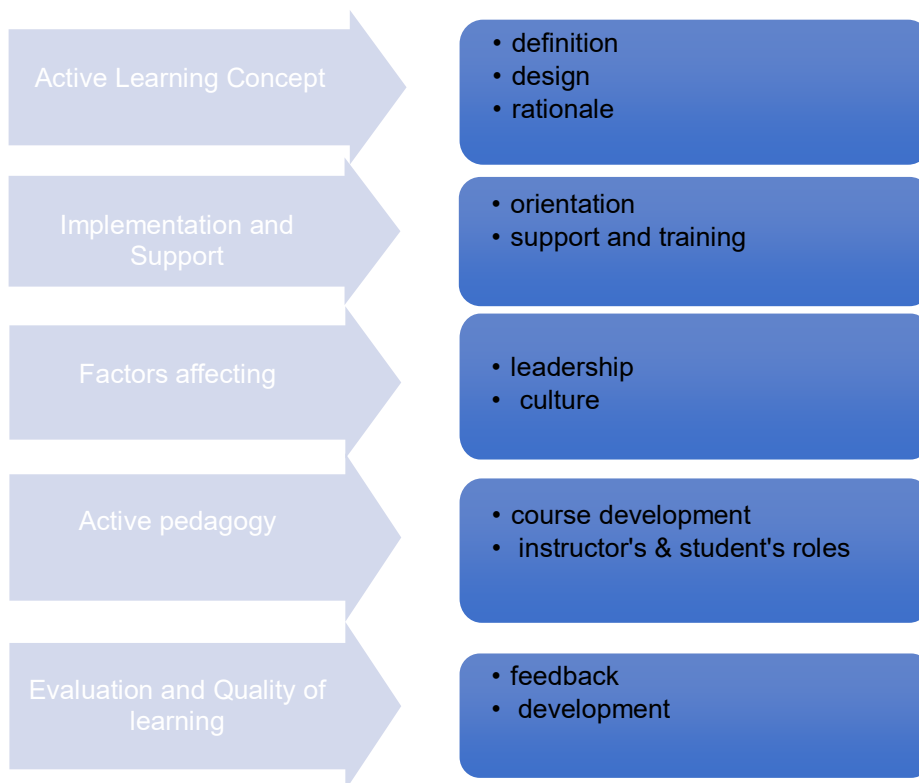
9.6 Active Learning Model

Implementing AL in an educational environment that has depended on a traditional didactic system needs careful strategies. This study explored the first implementation of an AL programme in Saudi universities and found five themes that were derived from the experience of students and lecturers. These themes are vital factors in formulating an AL model that can be utilized in other Saudi institutions, especially at a programme level. The final objective of the model is to summarise the factors that affect the implementation of active learning. This model can be deemed as a contribution to research in the area of AL as it includes the key elements of a theory founded on descriptions and explanations (Hood Cattaneo, 2017). The elements are: the factors that shape this theory, the ways in which these factors are linked, the reasons the factors are suggested with this relationship, and the limits of generalizability. The next paragraphs consider these elements in respect of the proposed AL model.

Figure 9.1 (below) demonstrates how these five factors comprise a model for AL implementation and the connections between them. For instance, the active concept is the key factor that reinforces all of the other factors. The implementation

of, and support for, AL are affected by that concept and, in turn, have an influence on the other factors. Next are the factors that influence active pedagogy and evaluation and development which are reinforced by the concept and the implementation. Finally, evaluation and development factors are affected by all of the factors starting from the active concept up to the active pedagogy.

Figure 9. 1: Alotaibi's Active Learning Model



The implications of each factor are listed in Table 9.1 which also indicates the responsibility of the institution and/or the lecturers for the implementation of each factor. These responsibilities show the proposed connections between the factors. It can be seen that institutions implementing AL at an institutional level have to support the lecturers and the students in their new roles within the new educational

environment. For instance, institutions need to consider the lecturers' contribution to the institutional decisions such, as the active model decision.

Table 9. 1: Guideline for implementing AL in Saudi Arabian universities

Responsible	Factor		Description
Institution & Lecturers	Active Definition	Concept:	Clarify the definition that reinforces the active concept in which a part of the traditional learning process is replaced by active learning
Institution & Lecturers	Model		Select a model that illuminates the proportion of learning that depends on AL methods.
Institution & Lecturers	Rationale		Explain the rationale behind this concept, with reference to relevant pedagogical issues.
Institution	Implementation and Support		Provide computer labs, internet access, and halls/theatres with required technologies
Institution	Orientation and Training		Present the active concept, the model and the rationale to the lecturers and students. Evaluate student's IT and study skills and propose appropriate training before enrolment in active courses. Evaluate lecturer's IT and teaching skills and propose training. Present student-centred strategies to lecturers and students as another method of instruction
Institution	Resistance		Address any resistance by lecturers or students
Lecturers (with support from the institution)	Active Pedagogy: Course Redesign		Select learning activities that can present courses in better ways: e.g. developing reactive activities. Identify class activities that can present the contents for on-campus courses efficiently
Lecturers	Lecturers' and Students' Roles		Comprehend the shift to becoming a facilitator and promote student engagement in learning with numerous teaching strategies. Identify how lecturer's roles affect student's roles in active learning
Institution & Lecturers	Course Evaluation		Assess the course founded on the students' perceptions and results
Institution	Evaluation and Quality of learning		Obtain feedback from lecturers, students and university staff involved in the programme

Institution & Lecturers	Development	Refine and develop the programme in response to the evaluation outcomes
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It is significant to note that this model is derived from participants' views even though they may not have had prior experience of active learning, a factor that makes it especially pertinent to the Saudi context. Consequently, assessing this model with outcomes from other participants with a previous AL experience is proposed. Nevertheless, as noted, it is expected that theorists should be sensitive to all probable boundary constraints (Whetten, 1989, p. 492). While this model is linked to the implementation of AL in the universities of Saudi Arabia, the researcher is confident that the assumptions and recommendations contained here will be of major value to other populations facing similar challenges. This model for AL is particularly relevant because nowadays the focus of the literature is on theories for AL design. It is hoped that this model will offers a vision for how AL can be implemented in Saudi higher education. In the following section an explanation will be given concerning how this model can be adopted and implemented in Saudi higher education institutions, including: the principle of quality, space and time, lecturers' and students' continuation of professional development, Saudi national culture and the model's appropriateness to the Saudi HE setting.

- **The principle of equality**

As has been explained in Chapter One, Saudi Arabia scored highly (95) in the power distance dimension, which means that inequality is a dominant feature of

Saudi society where power distance is inculcated from an early age. Leaders and decision makers should take into account the negative impact of such a culture. It should not be taken to an educational environment. Regulations, rules and policies that assert equality between females and males need to be developed. Regardless of what subject lecturers teach, leaders should decide how these subjects can be taught and delivered and which strategy can be implemented in such a course. In this way, lecturers' personal desires will be limited, and institutional work will be adopted and implemented instead.

- **Space and Time**

AL classrooms are learning environment spaces intended to promote interaction and engagement. They should be designed to minimise the barrier between lecturers and students, to facilitate collaborative learning activities and to improve teaching practices (Baepler & Walker, (2014); Carpenter *et al.*, (2013); Metzger, (2015); Pundak & Rozner, (2008)).

AL classrooms require a better space which should be designed specifically for student interaction and engagement. In recent years, AL classrooms are often equipped with various technologies to enhance student learning and support teaching innovation (Charles *et al.*, 2015; Chiu *et al.*, 2015; Dori & Belcher, 2005; Soderdahl, 2011).

Chiu (2016) suggested that a technology-enriched AL classroom would be appropriate for AL implementation. The technology-enriched type of AL

classrooms he suggested consist of a round-table configuration, as shown in Figure 9.2 (two trapezoid-shaped foldable tables assembled to form a hexagonal table), designed specifically for student group work (Whiteside & Fitzgerald, 2009). The classroom layout could be transformed into different settings to support various in-class activities, such as a semi-circular layout for observing lecturer demonstrations, a two-team layout for team debates and fold-up tables for activities that require no physical obstacles to be in the area. The suggested classroom was covered by the university wireless network and sufficient power outlets were installed around the room for charging students' laptops or mobile devices. It was also equipped with a range of advanced technologies, including an Echo360 presentation capturing system, a scanning electronic microscope and 3D printers, all to support various AL pedagogies. It has a maximum capacity of 50 students, accommodated with 10 hexagonal tables. For class sizes larger than the capacity, course leaders divided the class into smaller sections to use the AL classroom. To implement Aotaibi's model and gain the maximum benefit from it, this classroom might be one of the options that can be adopted and used for AL implementation in SA universities.



Figure 9.2: AL classroom with standard round table layout (adopted from Chiu and Cheng, 2017).

This study has found that timetables and time constraints are proving to be challenges for lecturers of active courses. One of the main issues is the time it takes to prepare AL lessons, since the preparation time needed to create new AL instructional strategies will often be greater than the preparation time needed to "recycle old lectures". Furthermore, using AL properly entails lecturers spending more time than usual when delivering their subjects. Class size can be a serious issue for lecturers, and the researcher has observed that classes that are too large preclude some students from active involvement, while small classes can lack sufficiently stimulating interaction. AL can be implemented only in a class with an average number of 30 students. Therefore, to implement the model correctly requires leaders to take account of these issues to reduce the number of students per class; they also have to provide time management resources and workshops

for teaching staff. Furthermore, leaders need to reallocate the lecturers' total hours annually by crediting time spent on AL preparation, as this would be a new dimension to lecturers' hours.

- **Continuing Professional Development**

Professional training programmes are considered as a key factor in implementing AL within learning institutions. Therefore, it is critical to pay close attention to how we train and support both new and experienced lecturers. Therefore, providing training on how to use AL strategies can be considered as a cornerstone of adopting this style of learning for lecturers and students alike. Consequently, universities need to develop procedures for the evaluation of their performance and training, thus ensuring an elevated level of professional skills and teaching competence.

Officially-approved training is important and is commonly requested by institutions, which means that the university should adopt and implement training programmes for all teaching staff. It is suggested, therefore, that specifically-designed training courses could be added to lecturers' requirements and should be considered as a prerequisite for promotion within the university. Therefore, providing training on how to use AL strategies could help the adoption of this style of learning for lecturers, and it could have major benefits for enhancing faculty members' teaching capabilities. Furthermore, as lecturers in Saudi universities have studied for their PhDs in different countries and therefore have different backgrounds, it is

important to develop a policy which clearly describes the learning style that should be used in each course and the professional training each lecturer needs to undertake that course.

- **Saudi National Culture**

This study (and other studies in the literature) showed that Saudi Arabia is characterised as high in both dimensions of national culture; power distance and uncertainty avoidance. Saudi culture is very conservative and thus there is naturally a high level of uncertainty of any new techniques. Furthermore, adopting a new technique within such a culture might be interpreted as having a new system imposed upon it. That is not to say that all lecturers or students, are opposed to adopting new systems; rather, it is a recognition that individuals prefer to continue using methods that have worked in the past.

It was clear from the results that have been presented in this study that those lecturers who were high in power distance and low in uncertainty avoidance, intended to adopt AL; conversely, those who were low in power distance and high in uncertainty avoidance would not implement AL unless they were convinced by its features and by its ability to benefit learners. The latter can be considered quite a challenge; therefore, decision makers should introduce and model AL strategies to the faculty and help them incorporate these techniques into their classrooms. Furthermore, to convince the faculty, the researcher suggests introducing an Active Learning Week: a week-long workshops series. The primary objectives of

the series are to introduce the faculty to the importance of AL, and to model and discuss a variety of AL strategies. Other objectives include:

- a. teaching strategies that the faculty can use with its students to help them be more successful in college
- b. modelling these strategies in workshops so that the faculty can see them in action
- c. using these strategies to empower the faculty to take greater responsibility for their teaching effectiveness.

- **The Model's Appropriateness to the Saudi HE Setting**

The model that has been proposed and presented in this study is appropriate and implementable in the Saudi HE setting. This is because all related factors that may have an impact on introducing AL in Saudi universities have been taken into account while developing this model. Human factors such as leadership and national culture which may have an impact on the success or failure of AL implementation have been included in this model. Furthermore, the researcher has examined organisational aspects, such as space and time and lecturers' and students' continuing professional development, which may also have an impact on AL implementation. These factors have been examined and investigated in the Saudi environment in the main universities in Saudi Arabia, providing the model with the appropriate setting – an HE setting in Saudi Arabia.

9.7 Leadership

Implementing change can be challenging, especially if there is resistance, if the change is unexpected and unwelcome, or if it flies in the face of tradition and prevailing customs. In recent decades, much scholarly attention has been devoted to examining the nature and scope of leadership and its relationship to organisations of different types and in different situations. The current research contributes to the proposition that leadership can have a positive impact on organisations and help them achieve their organisational goals and objectives. Review of the literature suggested that leadership has major effects on organisational features such as overall performance, job satisfaction, product development success, and organisational commitment. Leadership is a factor of utmost importance to organisational structure, and its role was acknowledged in the findings of this research. The current research reviews the main forms of leadership and the effects, if any, on the introduction of AL to Saudi universities. In this research, an analysis of the collected data shows that two leadership styles (transformational and transactional) have been applied in the three universities. However, a key finding is that the forms of leadership and their application are not fixed, instead being applied according to circumstances. The approach that was adopted to examine leadership in this study was to identify leaders who were enacting significant changes in regard to the adoption and implementation of new learning styles, such as active learning, cooperative learning, e-learning, and/or any other approaches that might have an impact on student performance.

In order to recruit suitably qualified participants for the discussions (interviews), the researcher sought people who had demonstrated experience of these various methods of learning, 17 academics from across the three campuses being invited to contribute to the project. They included a chancellor, pro-vice chancellors, deans, and departmental heads. Seven participants were senior academics at UQ university, six held senior posts at KS university, and the other four were from PN university. One held the position of Chancellor, two were Pro-vice Chancellors, five were deans, and nine were departmental heads.

According to the results, 60% of respondents at universities UQ and KS stated that they were challenging the status quo of traditional methods of learning by encouraging teaching staff to move to more modern methods and new teaching styles that led to improve learning outcomes. When questioned, the participants' leaders typically expressed the view that capable leaders are the corner-stone to the success of any organisation, and an effective leader is one who has "the ability to achieve organisational goals". Such leaders, they said, were aware of what leadership is and what leadership can do for organisations. However, on the matter of effective leadership the participants' leaders from University PN were less sanguine or confident than those at the other two universities, few of them being aware of where their university was going; nor could they explain how best to move people (both lecturers and students) towards accepted goals – in this case the adoption of AL methods. One possible explanation for this apparent lack of understanding of the impact a leader can have is that this university was relatively

new, having been established in 2008; this means that the university was still in its formative phase, building its capabilities, and seeking to create a distinctive identity. There was some degree of consensus (but not total agreement) among participants that institutional leaders should shape the quality and level of educational standards. The participants' views were consistent with that of Bo (2013) who claims that educational leaders can profoundly shape the quality and level of educational courses and standards, and they can help elevate teaching methods and enhance the experiences of students. Furthermore, it was evident from their comments that in the modern setting other leadership qualities are desirable; for example, innovation, imagination, vision, and the capacity to foster creatively 'disruptive' ideas.

One factor that was accepted as a feature of leadership was that leaders are not expected to maintain the status quo. Change is now an element of modern life, and management of change is a prerequisite for leadership. As explained in Chapter 8 (see 8.2), participants asserted that creative deans provide the conditions, environment, and opportunities for lecturers to be innovative and seek to identify imaginative solutions to problems that may arise during the process of change. Indeed, creativity emerged from the data as being a highly desirable quality in leaders, and as confirmed by Tremblay *et al* (2012), the ability to develop and apply original ideas is seen as a critical factor for the continuous improvement of outcomes of universities. As one dean (LUQ4) commented, effective leaders see problems not as obstacles but as opportunities for improvement. Furthermore,

effective leaders are forward-focussed; that is, they scan their educational environment for issues which, if not addressed promptly, could prevent colleges from engaging in more radical change as they strive to prepare their students for the future. This view is consistent with the work of Clark (2009) who stated that creative leaders can be disruptive and surprising; they can invent new solutions to challenging situations and use imagination and skills to apply relevant theories and concepts. Therefore, adoption of new and different teaching methods needs creative leaders who can support new styles of learning.

The educational vision for leaders in this study focused on providing an education relevant to national economic goals and to the future employment prospects of students. That is, as discussed in Chapter 8 (see 8.2), commercial pragmatism rather than social idealism now considered to be guiding principles for the management of universities. Tertiary institutions are expected to provide students with skills and knowledge to meet the prevailing needs of the labour market as well as the needs anticipated for the future. This view was expressed by many participants and it indicates that the model of leadership that was adopted in the universities under study was characterized by pragmatism together with a strong vision for social and economic improvement - and a total commitment to that vision. Therefore, the leaders preferred by the participants could be characterized as being visionary; that is, individuals who could attract followers (in this scenario, the lecturing staff), inspire them to pursue a shared goal, and to achieve objectives beyond ordinary expectations. This view confirms that described by Gmelch and

Miskin (1993) who stated that one of challenges that universities face is to recognize the strategic planning process for creating a productive department, a task which requires a clear vision and the capacity to formulate a departmental mission statement that describes the long-term intent and the priorities for endeavours and for the decision-making processes.

As reported in Section 8.2, the participants in this study who held senior positions were aware of the different concepts and philosophies of leadership, and they agreed that most university leaders vary their approaches according to their situations. They believe that there is no one 'best' style of leading and that, in general, styles reflect a specific time and situation in which they will be most effective. This means that good leaders are those who select their leadership styles based on what is needed at the time, and what is the best tool for the job; that is, they adjust their methods to deal with various types of followers in different situations; as Aabed (2006) commented, according to circumstances a leader should be able to shift between any of four key leadership styles: telling, selling, participating, and delegating.

Some participants (40%) mentioned (see 8.2) that leaders sometimes appeal to the self-interest of their staff by providing incentives and recognition for their efforts, this being reported to apply in some Saudi universities where rewards and bonuses are provided to lecturers in order to win their support. This approach has been used for those lecturers who adopt creative ideas or new learning styles, such as

active learning. This dimension, a 'reward system', is considered to be a part of a transactional leadership style.

The participants who held senior positions were generally supportive of implementing AL, though they had evidently experienced different approaches to leadership when seeking to introduce new instructional methods. They were all, to some extent, transformational and transactional leaders. They focused on individual considerations by allocating special attention to followers according to the latter's needs, at times acting as coaches and mentors. They also created incentives and motivational inducements in the early stages of introducing active learning, and these reportedly had a positive impact on encouraging lecturers. This conclusion accords with Wirbaa & Shmailan (2015) who examined the leadership styles of managers in universities in the Eastern Province and the Middle Province of Saudi Arabia. Those researchers concluded that most managers in academic institutions in those provinces are 'transformational', though few were categorised as 'transactional' leaders.

To summarise, leaders in the universities under investigation can be characterised, to some extent, as transformational and transactional leaders. Additionally, leadership was deemed by the participants as being of particular importance at a time of change and at a time when a new approach to teaching and learning was being implemented. Therefore, it is concluded that in order to implement AL in other Saudi universities leaders would likely benefit by adopting such styles.

Further, these styles of leadership are critical not just in universities but in all organisations experiencing change, as numerous studies confirm that transformational and transactional leadership have positive impacts in various ways: on commitment, motivation, project quality, organisational commitment, effectiveness, and they are positively related to innovative behaviour.

9.8 Saudi Culture

The literature review revealed that national culture influences all aspects of Saudi life, including education. In addition, there are strong links between culture and learning, these links being reflected in how people prefer to learn and how they tend to process information (Samovar *et al*, 2009, p. 338). Studies analysing learning styles across cultures (Sywelem *et al*, 2012; Romanelli *et al*, 2009; De Vita, 2001) indicate that culture affects environmental perceptions which, in turn, influence the ways by which information is processed and organised. Furthermore, culture plays a role in conditioning and strengthening learning styles and partly explains why teaching approaches used in specific parts of the world may be more effective or less effective when transplanted to another locale (Joy & Kolb, 2009). Analysed data for this study showed that although the majority of participants (more than 60%) endorsed the idea of introducing AL in one form or another, for most participants Saudi society is one characterised as a power-distance and uncertainty-avoidance culture. According to this study, participants expressed the belief that people should be considered equal in law only, and in this they accepted that inequality would exist in many aspects of life. They wondered about who said

that people are the same? Consequently, such attitudes could have an impact on accepting what superiors decide and take it for granted. Culturally, this believes leads to obey directions from supervisors or seiner management, if for example they decide to implement AL within the university lecturers would have to obey them. Furthermore, the information provided by the participants (See 8.4.1) showed support for the belief that the decision-making process should be taken through established channels or it might be taken individually in some situations. Although some participants reported having contributed to the making of decisions, most decisions come from the most senior levels; in the view of the participants top-down decisions means that the leaders must take full responsibility for their choices.

As explained in Chapter 8 (see 8.4.1), participants in this study described their society and their institutions as a power-distance culture. Indeed, this dimension is inculcated into families from an early age. This result is consistent with numerous studies which show that Saudi society is characterised as a power-distance culture (Alomiri, 2015). Similarly, Hofstede (1991) confirmed that said Saudi Arabia scored highly on a scale for assessing power distance (95) which means that inequality is a dominant feature of Saudi society. This dimension has a major impact on people's acceptance; that is when senior members of society or organisations want something to take place it will be endorsed and followed regardless of personal preferences. A country with a high score for power-distance places emphasis on

obedience; for instance, deference to parents and to those of a higher status, this being a requisite for the younger Saudi generation.

Traditionally, in Saudi society parents, teachers, lecturers, and neighbours, for example, were highly respected and listened to with deference. Such a culture is characterised as authoritarian, and people are treated unequally in Saudi society. According to (Alomiri, 2015) if power distance is high, followers expect a leader to take all the responsibility and all the risks by making the important decisions alone and unaided. Consequently, this dimension can be used to impose what leaders want, so if leaders decide to implement AL as a new style of teaching within universities the followers (in this scenario, the lecturers) will adhere to the course of action.

'Uncertainty avoidance' is the second dimension that has been assessed. Most participants in this study (more than 65%) maintain rigid codes of belief and behaviour and are intolerant of unorthodox behaviour and ideas. They prefer planning everything carefully in order to avoid uncertainty, to reduce risks to the minimum, and to proceed with changes step by step. Consequently, this approach can apply in regard to the acceptance of a new style of learning such as AL, the reason being that AL can entail risks and so those cultures which avoid uncertainty are expected to adopt new things cautiously. As Aguirre *et al*, (2013) explain, people usually want to stay in their 'comfort zone' but change typically brings them to another zone.

Participants showed a desire to follow a strict structure with rules and formalized policies, established procedures, and a clear operational system. As might be expected, some participants were opposed to change in one form or another. They believe that the current way of doing things works well; besides, they have been doing it for many years. Therefore, the adoption of a new style of learning might be threatened by a high score of uncertainty-avoidance for Saudi culture. This conclusion was consistent with that of Porter and McDaniel (2009) who claim that there is a strong link between culture and adopting a new learning style.

In summary, power-distance and uncertainty-avoidance are cultural dimensions that are critical factors in respect of the acceptance or rejection of AL implementation. It was clear from the results that have been presented and discussed that those leaders who were high in power-distance intended to adopt AL whereas those who were high in uncertainty-avoidance would not implement AL unless they were convinced of the ability of AL to benefit learners.

9.9 Conclusion

This study shows that AL can be implemented effectively into tertiary institutions in Saudi Arabia, though to do so will entail taking account of the challenging issues identified here. Policies and procedures relating to AL need to be defined and made available to staff, and particular attention needs to be devoted to both pre-service and on-going staff training. Similarly, the task of advising students about the use of AL in their courses must be addressed; for students familiar with

traditional teacher-centred lessons the use of AL methods can be concerning. Leadership and culture had shown an impact on AL implementation. Furthermore, those who support AL implementation were transformational and transactional leaders. These findings are consistent with previous studies which concluded to that most managers in academic institutions are 'transformational' and to some extent 'transactional' leaders. Culture, in the other hand, had also an impact on accepting or rejecting AL implementation. The findings of this study showed that the two cultural dimensions power-distance and uncertainty-avoidance had an impact on AL implementation were those leaders who were high in power-distance intended to adopt AL whereas those who were high in uncertainty-avoidance would not implement AL unless they were convinced of the ability of AL to benefit learners. Lastly, in response to the data that have been collected and analysed, this study presents a learning model composed of five themes. The themes propose steps which should be applied in the process of implementation, and the AL model identifies and lists the factors that affect the implementation of AL in Saudi universities.

Chapter 10: Conclusion

10.1 Introduction

In this chapter conclusions are drawn from the student and lecturers' views. The implications and recommendations stemming from the study are detailed. Then the various challenges and limitations of the research are discussed, the chapter ending with suggestions for further research.

10.2 Conclusion

This study investigated the many factors associated with the implementation of AL in three participating universities in Saudi Arabia. It considered the pedagogical and theoretical underpinnings of AL and then identified the challenges and benefits, along with the advantages and disadvantages that subsequently emerged when AL had been introduced. Furthermore, this study investigated the perceptions of staff, students and leaders. The findings of this study indicate that there were many factors that impacted, both positively and/or negatively on the process of implementation. The main factors identified by this investigation were leadership, national culture, training, and technology, and these influenced the adoption of AL both directly and/or indirectly.

The ministry of higher education supports the Saudi Arabia's Vision 2030 by working with National Transformation Program 2020 on developing philosophy, policy, and goals of curricula, means of development and connecting all these

means with the programs of teachers' and lecturers' preparation and their professional development. Furthermore, the ministry is working on developing teaching methods and new learning styles such as AL that focus on learner not on teachers or lecturers, and concentrate on inculcating skills, personality development, improving confidence, and promoting spirit of creativeness. The ministry works on developing attractive, preferred, and simulant environment, connecting it with supportive and integrated services systems. The intended objective of education system, therefore, is to nurture generation of students who have, values, appropriate basic skills of distinct specialisations¹⁰.

A particular emphasis of this study was that AL offered heightened learning experiences and improved understanding of the students attending those institutions. The results of this study reveal a distinct pattern in adoption and use of AL in universities, although the processes of to implement it could be varied between them. The senior management in participating universities expressed positive views of the extent to which factors such as technology and social networks would elevate the effects of AL in the near future. This positive outlook is also a reflection of the fact that views of the rising generation are shaped more by the media and associated technologies, with Saudi youth being ranked first among Arab nations in regard to their use of social media. These factors can be considered as advantages to support the adoption and implementation of AL, not just in higher education, but apparently through all levels of general education.

¹⁰ <https://www.moe.gov.sa/en/Pages/vision2030.aspx>

The results of the data analysis show that AL has not yet been fully or adequately implemented in Saudi universities, and so far, it has not received official endorsement as an educational policy at other levels of the education system. It was an initiative that was based primarily on leadership, and to a lesser extent on the experiences and proposals of lecturing staff. The universities in Saudi Arabia have varied markedly in their adoption of AL practices and principles, and it still faces many challenges, and some resistance, in Saudi universities. One of many factors that affect AL implementation across the participating universities, one notable impediment seems to be lecturers' low-level of acceptance of the system. Interestingly, it was found that, in general, the student participants were pro-active in their learning approaches; most expressing the view that AL is an effective method for acquiring better understanding through experiencing and assimilating newly acquired information. AL has been adopted and implemented differently in many courses at the three universities, and as explained in chapter seven, these methods were perceived by students as helping to raise their GPA and thus their satisfaction with their performance. Many instructional strategies and forms of targeted learning have been investigated they include; critical and creative thinking; speaking with a partner, in a small group, or with the entire class; expressing ideas through writing; giving and receiving feedback; reflecting on topics being studied. There was a degree of consensus among participants from all three universities that these strategies are important and could contribute positively to better understanding the content of their courses.

Leadership, training, and Saudi national culture and their impact on the introduction of AL were investigated and discussed. The participating academics were generally supportive of its implementation, though they had evidently experienced different leadership styles when new instructional methods were being introduced. Analysis of the data showed that the senior institutional staff who were responsible for introducing AL were, to some extent, transformational and transactional leaders. They focused on individual considerations and created incentives and motivational inducements in the early stages of introducing AL, and these reportedly had a positive impact on encouraging lecturers to support the changes.

Providing professional training programmes for teaching staff was seen as a key factor in implementing AL. Providing training for all stakeholders on how to use active learning strategies helped teaching staff to adopt this style of learning, and it had major benefits for enhancing faculty members' confidence and their teaching capabilities. A key concern that emerges from the analysis was that universities have not always provided adequate training for their lecturers and students. Therefore, one strong finding is that universities need to introduce a package of training on active-learning strategies to ensure that all are well prepared to adopt active learning methods.

Saudi national culture, and its influence on the adoption of AL, was the last factor investigated in this study. The Saudi national culture was characterised as high in

the dimensions of power-distance and uncertainty-avoidance, and it is shown here that these dimensions strongly influence lecturers' acceptance (or rejection) of the implementation of active learning. Interestingly, analysis of the data showed that those who were high in respect of uncertainty-avoidance were more likely to oppose AL (or showed little interest in implementing AL methods). Conversely, those who were low in uncertainty-avoidance were supportive of AL in one form or another.

10.3 Implications and Recommendations

It is anticipated that the advantages AL will encourage Saudi decision-makers to look at implementing AL programmes across the tertiary sector. AL can be regarded as an efficient and effective method to improve exam scores and decrease failure rates (Freeman et. al, 2014; Prince, 2004; Michael, 2006). Indeed, my study suggests that educationalists in Saudi Arabia should assert AL beneficial influence on the learning and teaching experiences of all students, the quality of their learning, and the elevated standards of learning. Nevertheless, the teaching and learning experiences of the AL environment are affected by a number of factors such as leadership, national culture and training which are explained in the learning model described in Chapter Nine (See Section 9.6).

While this study showed that AL was perceived to enhance student learning in Saudi Arabia, nevertheless the teaching and learning experiences raised some challenges that have to be addressed. One particular challenge is that active

pedagogy demands more effort from lecturers to promote stimulating engagement from students. Additionally, face-to-face instruction is recognised as a challenge which has to be enhanced, AL is to achieve an improved inter-personal learning environment. Another issue is that the rationale for AL and for the shift from teacher-centred to student-centred approaches needs to be better explained and justified.

The rapid expansion of, and reforms to, the Saudi education system requires a well-structured long-term plan for AL implementation, but as yet there is no coherent strategy for nation-wide change that includes AL. In regard to the recognised advantages and challenges of AL, and to the mixed and varied responses of the participants, it is recommended that such a coherent strategy would benefit from the active-learning model detailed above. It is expected that the model would assist decision makers to develop such a plan.

Educational institutions, not just central government agencies, have the primary role in both promoting and implementing AL. Indeed, a new learning environment, such as that offered by AL, can best be achieved if it gains strong support at all levels, not just within individual institutions. Decision makers have to comprehend and act on the belief that about 50% of lecturers and students generally value the effectiveness of AL, and thus they should work on the other 50% to be fully informed of the rationale and merits of the active format. Furthermore, institutions need to identify and endorse different models of AL according to the specific

features of each course; there is not a one-size-fits-all model applicable to all subjects and topics.

According to the participating lecturers, strategies for implementing AL may entail new technologies and new methods such as Wi-Fi on-campus, flexible attendance, and (for lecturers) financial incentives. It is the lecturers who are ultimately responsible for implementing AL, for adopting new methods and for making it all work. Consequently, they must possess appropriate high-level teaching and IT skills, and they must adopt clear course guidelines including detailed curricula and rubrics. As most Saudi students have not encountered AL prior to their participating in active courses, it is suggested that students' technical skills be evaluated prior to enrolment. Training may need to be provided to those students who lack the necessary technical competencies. Such training should be viewed as part of a broader support service for new undergraduate students of active courses; the training might entail other matters such as study skills and time-management, all of which could be overseen by campus student-service centres. Additionally, a well-structured annual assessment that explores students' and lecturers' perceptions of active learning would enable AL methods to be refined and improved.

The proposals for training described above concentrate on technical and professional development, and active learning pedagogy has been given less consideration. Nevertheless, this too must be addressed as part of the process of initial implementation. AL should not be perceived as a fixed solution; flexibility and

on-going refinement will prevent it becoming rigid, and so it would be beneficial to establish an Active Learning Department in a national centre that offers consultation and accreditation of active programmes and courses. It is recommended that such a department should develop criteria for course design in addition to standards for participating lecturers. It should emphasise the new role of the lecturer as a facilitator in this new learning environment.

10.4 Challenges and Limitations

Major changes that confront existing norms are often resisted despite offering improvements and benefits. The introduction of AL to Saudi universities has encountered such challenges, and because of its novelty there is little literature on the subject. Thus, one limitation to this project is that the discussion has been linked to international research and to a few local studies in which AL has been integrated with traditional methods. One challenge that I encountered was the difficulty of obtaining any documented policies of the implementation of AL in Saudi universities.

The project faced certain limitations beyond the lack of contextualised research. It also faced issues around primary data collection. For example, it proved quite difficult to obtain detailed data from the participants, particularly the students who only responded in short and repeated answers. Most of the interviewed students had limited understanding of AL or its strategies, few being willing to express their feeling and opinions freely. Their reservations appeared to stem from the

conservative Saudi education system that, to date, has not provided students with the opportunity to express their views; their reticence having the effect of limiting their honest contribution to the qualitative research. The projects initial literature review demonstrates that, qualitative research has been little used in Saudi educational research, and most Saudi educational studies were based on the quantitative one. Consequently, the participants' readiness to be part of social research and to express their views openly was quite constrained. The participating lecturers, however, were significantly more comfortable expressing their views. It was evident that the traditional approach to teaching in Saudi Arabia has been a one-way delivery; that is, students' experiences or views have not been invited during class, thus impeding their confidence in voicing opinions. However, in the interviews, additional questions varied according to the student's responses, but it enabled me to encourage the students to expand their answers and express their views in more depth.

Another factor concerns language. English is not commonly used for communication in Saudi Arabia; therefore, I was required to translate all of the research instruments into Arabic. The data collected in Arabic was then translated into English and interpreted accordingly.

This study was focused on the course of events in three Saudi universities and therefore its findings may be significant only in the Saudi and Arabic educational context. That's perhaps because the similarities in cultural and economic

environments in Arab world. The results are specific to AL and its strategies and variables might have an impact only on its implementation in Saudi universities. They may be useful as general indicators for other universities, but may not automatically apply to them. In other words, it is necessary to take into account the socio-cultural context in which the work was carried out. This study was conducted within a specific period (2012-2018). Other periods may witness developments and changes in Saudi universities and so yield different outcomes. Particularly in the rapid changes taking place in KSA since Prince Mohammed bin Salman appointed as a Crown Prince. Moreover, the cross-sectional nature of this work was another limitation. It is possible that other aspects of leadership, national culture, training, and other factors, and their impact on AL implementation, will emerge in future years. A longitudinal study might yield additional insights into the influences of such factors on AL implementation. Also, this study did not provide the opportunity to observe the interaction between leaders and lecturers. Furthermore, while national culture was considered to have an impact (both positive and/or negative) on the acceptance or rejection of AL, some of the participating lecturers were non-Saudis who were excluded from the cultural considerations of this project.

This study was conducted in three Saudi universities during a set period of time. In Saudi Arabia, there are more than 25 universities. It was not possible to include participants from all institutions, and other leaders might have different leadership styles and possibly different approaches to the use of AL. The final limitation was that the AL evaluations were conducted twice (November 2014 and January 2015)

and other variables were assessed between these two months. If practicable, it would be useful for a future long-term study to assess the AL implementation in the three universities in order to check the progress of the changes and to measure the other variables to see how leadership styles, national culture and training are able to have an impact on implementation.

10.5 Suggestions for Further Research

Based on the review of the literature of AL, there is a high demand for further research. In particular, the shortage of Arabic resources in AL emphasises the need for continuous research into this issue in Arab contexts. As a result of undertaking this investigation it is possible to identify several areas for future study. Further research should investigate the perceptions of lecturers who hold different qualifications, who have experienced different training, and who work in different disciplines. Also, it is suggested that those lecturers who initially were reluctant to participate, or who were rejected, be interviewed at a future date in order to investigate whether their views might have changed. Furthermore, exploring the experiences of Saudi educationalists in regard to the impacts (if any) of AL on students' performance would greatly enrich the debate about this methodology in higher education. Further, the educational environment and/or social networks are both important factors that might support AL implementation, and these need to be explored and investigated.

The research identified several factors which may influence the adoption of AL strategies, but other factors that influence learning outcomes also need to be investigated. Colleges in some universities adopt active learning strategies as super tools for learning; consequently, more in-depth case studies should be undertaken to examine relevant issues that are appropriate to each college. Case studies that seek to identify why some colleges have not seriously considered active learning strategies would be very helpful. For example, do some academic leaders perceive shortcomings in AL?; are some traditional educational methods still suitable?; is there a lack of resources?; is professional knowledge inadequate? Such studies might identify the circumstances under which the traditional education methods are considered to be suitable. Other areas of future investigation arising from this project include a study of university characteristics that explain why they choose to use (or not use) active learning strategies. In Saudi Arabia there are two types of universities (public and private); in the light of recent developments in the national education system it is pertinent to ask how private universities might adopt AL strategies, and if they differ from public universities in respect of implementation. To undertake such a study of so many institutions it would be necessary to conduct a survey by means of a questionnaire that seeks data on aspects of implementation and on the use of methods such as cooperative learning, e-learning, and blended learning, and their impact on students' performance.

This study investigated some variables such as leadership styles, and it would be very relevant to compare female and male approaches to leadership in respect of implementing changes. Furthermore, this study focused on leaders who had demonstrated experience of new styles of learning; it would be interesting to examine all leaders regardless of whether or not they had implemented AL. This would allow us to examine leadership styles and to identify the characteristics of those who support AL and those who do not. The impact of AL on students' performance is another variable that needs to be examined.

Despite these limitations, this study has provided many additional insights into areas relating to AL strategies. All research is subject to limitations, but all contribute to the advancement of human knowledge, and in this instance to the improvement of methods of teaching and learning. It is also hoped that this research will motivate researchers to undertake future research in the areas suggested above.

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Appendices

Appendix A: Data Collection Methods Forms

Students Focus Group:

1. Can you tell me what you understand by the term 'active learning'?
2. What experience of AL have you had? Please can you elaborate?
3. Could you define some characteristics of active learning?
4. How would AL differ from learning that is not active?
5. What are disadvantages and advantages of active learning, from your point of view?
6. Is it an appropriate form of teaching?
7. What are some of the challenges?

Interview with Students:

1. What was your initial expectation for learning and teaching?
2. Have these expectations been realised?
3. How acceptable do you think AL is in the Saudi culture?
4. How do you feel you are progressing?
5. What approach to teaching do you think you learn least from?
6. Is there anything that prevents you from learning effectively?

Lecturers Focus Group:

1. Can you tell me what you understand by the term 'active learning'?
2. How do you want lecturers to modify their way of teaching so as to be active?
3. What are the advantages of active courses from your point of view?
4. Do you feel that AL is appropriate in the Saudi Higher Education system? Why?
5. What are your views on AL based on?
6. If you were in charge, what style of learning in the university would you adopt?
7. Does the university have guidelines and policies about the application of active learning? What are they?
8. What obstacles do you face in implementing active learning?

Interview with Lecturers:

1. To what degree do you think the Saudi culture has accepted active learning?
2. Do you or your students face any obstacles in AL courses or in other subjects that take an AL approach?
3. How would you describe your current AL practices?
4. What is your view of the future of AL in Saudi Arabia?
5. If you do not use an AL style in your subject(s), what are the reasons behind this?
6. Do you have any suggestions or comments?

National culture:**a) Power Distance Dimension:**

1. How do you explain inequality in a society? Is it acceptable?
2. Can you explain the decision-making process in your organisation?
3. Which characteristics are more important for you: authority or individuality? Why?
4. Describe and explain your relationship with your current boss. Is it characterized by fear or challenge?

b) Uncertainty Avoidance Dimension:

1. How do you deal with risks?
2. What is your preferred method of business management? For example, is it formal, with many rules and policies, or informal? Why?
3. Do you believe that a change is positive and should change happen? Why?
4. To what extent do employees respect rules and regularities in your organisation?

Professional training programs:

1. What is your attitude in regard to the value of employee development activities?
2. What types of professional development activities do you use? Are there different activities for different roles within the organisation?
3. How effective are the professional development activities within your organisation?
4. What professional competencies do faculty members require to implement AL correctly?

Leadership:

1. When you think about the word “leadership”, what comes to mind?
2. Describe your current boss and your favourite boss. What are the characteristics that made the latter your favourite?
3. Which style of leadership can work well in different situations?
4. Describe a situation where others with whom you worked on a particular project disagreed with your ideas (decisions). What did you do?

Observation Agenda Form

Date:

Time:

Course Number:

- Type of instructions
- Interaction –dialogue
- Student engagement
- Lecturer feedback

Appendix B: Participants Consent Form

I have been fully informed about the aims and purposes of the project.
I understand that:

1. There is no compulsion for me to participate in this research project and, if I do choose to participate I may, up to the point of data analysis. ☐
2. Any information about me and any information which I give will be used solely for the purposes of this research project, which may include publications. ☐
3. All information I give will be treated as confidential; the researcher will make every effort to preserve my anonymity. ☐

.....

.....

(Signature of participant)
(Date)

.....

(Printed name of participant)

One copy of this form will be kept by the participant; a second copy will be kept by the researcher.

The tape-recorded conversation made during the interview (with individuals and focus group) will not be duplicated and will be kept in the possession of the researcher, Fatmah Alotaibi. If you have any concerns about the project that you would like to discuss, please contact the researcher:

Fatmah Alotaibi, email: fatmah.alotaibi@postgrad.plymouth.ac.uk

Appendix C: Ethical Research Forms

8 October 2014

CONFIDENTIAL

Fatmah Alotaibi
Plymouth Institute of Education
Faculty of Arts and Humanities
Plymouth University
Room 205 Nancy Astor Building

Dear Fatmah

Application for Approval by Education Research Ethics Sub-committee

Reference Number: 13/14-63

Application Title: *Exploration of Active Learning in Saudi Universities and its Effect on Students' Performance*

I am pleased to inform you that the Education Research Ethics Sub-committee has granted approval to you to conduct this research subject to the following condition:

- All documentation to be subject to accurate proof reading by a native English speaker for typographic errors and use of English. Whilst the committee are aware that the information sheets, etc will be translated into Arabic, it is important that the documentation is correct. A corrected copy of the documentation should be submitted to the committee.

Please note that this approval is for three years, after which you will be required to seek extension of existing approval.

Please note that should any MAJOR changes to your research design occur which effect the ethics of procedures involved you must inform the Committee. Please contact Claire Butcher on (01752) 585337 or by email claire.butcher@plymouth.ac.uk

Yours sincerely



Professor Linda la Velle
Chair, Education Research Ethics Sub-committee -
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Appendix D: Timeline of data collection activities

University	Data collection method	Date and time	Duration
Umm Alqura	Lecturers		
	Interviews	3,4,5/11/2014	3 days
	Focus groups	7,8,9/11/2014	4 days
	Observations	11,12,13,14/11/2014	4 days
	Students		
	Interviews	16,17/11/2014	2 days
	Focus groups	19,20,22/11/2014	3 days
	Observations	25,26,28,30/11/2014	5 days
King Saud	Lecturers		
	Interviews	3,4,6/12/2014	3 days
	Focus groups	9,10,12/12/2014	3 days
	Observations	14,15,17,18/12/2014	4 days
	Students		
	Interviews	21,21/12/2014	2 days
	Focus groups	23,25,26/12/2014	3 days
	Observations	27,28,29,30/12/2014	4 days
Prince Nora	Lecturers		
	Interviews	3,4,6/1/2015	3 days
	Focus groups	8,9,11/1/2015	3 days
	Observations	14,15,17,19 /1/2015	4 days
	Students		
	Interviews	21,22/1/2015	2 days
	Focus groups	24,25,27 /1/2015	3 days
	Observations	2,3,5,6/1/2015	4 days

Data collection for leadership, culture and training

University	Data collection method	Date and time	Duration
Umm Alqura	Interviews	3-4/8/2016	2 days
King Saud	Interviews	8-9/8/2016	2 days
Prince Nora	Interviews	10-11/8/2016	2 days

Appendix E: Published Papers

A Critical Analysis of the Literature in Women's Leadership in Saudi Arabia

Fatmah Alotaibi, Roger Cutting & Julia Morgan

Faculty of Arts & Humanities

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Abstract--The presence of women in various fields of employment and aspects of public life in Saudi Arabia has been increasing continuously, with the last 10 years witnessing considerable growth in the participation of women in senior management positions and in the decision-making process in public and private sectors. In response to this trend, this paper attempts to explore women leadership opportunity in the Saudi environment. The paper highlights the fact that although there are many obstacles for Saudi women who are seeking to lead, there is still considerable scope for them to be appointed as leaders in the social, political and economic spheres. Women first joined the consultative assembly in 2013; in the same year women were appointed as deputy chairpersons of related committees. In 2015, women voted and ran for office in the municipal elections. Such developments indicate considerable progress in terms of the willingness of organisations to grant Saudi women the chance to occupy managerial positions.

Keywords: Women, Leadership, Saudi Culture, Islamic Culture, Saudi Arabia

I. INTRODUCTION

The phenomenon of leadership has been extensively researched because it is believed that it plays a most important role in the success of countries, organizations and communities [1]. It is considered to be the main and crucial factor in influencing group processes and outcomes. Stereotypes, however, are often a potent barrier to women's advancement to positions of leadership. This assertion is the consensus view not only of social and organizational researchers but also of women who have substantial experience as leaders.

Gender issues within developing countries have been the focus of many studies over the last few decades [2]. The Arab Gulf Countries, however, have received limited attention [3]. Some of these studies focused on Saudi women and the loss of their rights [4]. The revival of women's studies in Saudi Arabia was apparently due, in part, to the birth of women's movements within and after the Gulf War in 1991 with the first attempt by women in Saudi Arabia to test the ban on women drivers inside cities.

Various articles and books from Western and Middle Eastern authors have covered women and their rights, reflecting an intensive interest in all areas of social science and the

humanities (Offenhauer, 2005; Metcalfe, 2008 & 2011; Doumato, 2010; Wagemakers et al, 2012; Odine, 2013).

Furthermore, many conferences have been held to discuss women issues (e.g. World Conference on Women, Copenhagen, 1980; Beijing, 1995; International Conference on Population, Mexico, 1984; International Conference on Population and Development/Cairo, 1994). Such conferences have been held internationally to try to eliminate all forms of discrimination against women.

Although leadership has been researched extensively, no consensual definition of either the conception of leadership or its nature seems to have been reached. Rost (1993) examined 587 publications, within which he found 221 different definitions of leadership. To define leadership, the attention should be given to the whole process: individual personal traits, leader behaviours, followers' behaviours and perceptions, task goals and situations. According to Kofman (2006, p.9), 'Leadership is a process by which a person sets a purpose for others to follow and motivates them to pursue it with effectiveness and full commitment'. Northouse (2010) defined leadership as mainly a process between the leader and the followers "to influence others to achieve a common goal".

Therefore, such definitions reflect several components that describe leadership as: (a) a process (b) influence (c) context of a group (d) goals attainment and (e) leaders and their followers are sharing the same goals. Women have increasingly moved toward greater gender equality at home and in the workplace.

In some nations, women have steadily emerged in leadership roles in all societal spheres in the last few decades (Chandler, 2011). Women have been making their way in ever-increasing numbers to the uppermost rungs of the corporate ladder, ascending to leadership positions once occupied almost exclusively by men (Matsa and Miller, 2012). They bring to the exercise of leadership an arsenal of strengths, which increasingly are received to benefit the organisations that they lead on national or global levels. However, although they are trying to take part in leadership roles, women are still underrepresented in such positions in corporations, institutions of higher education, and in the political sector.

Women now hold just 15 per cent of corporate officer positions and board seats in Fortune 500 companies, up from about 9 per cent of each 15 years ago, and 3 per cent of CEO spots, up from one-fifth of one per cent (Matsa and Miller,

2012). In the U.S., for example; women now make up 23% of American CEOs. Few women reach the top in higher education, although they increasingly enter the ranks of academia. A total of 453 women, representing 16 per cent of all presidents, now head U.S. colleges and universities. As of July 2013, there were only 19 female elected presidents and prime ministers in power around the globe (Llopis, 2014). This particular study focuses on literature about women's leadership in Saudi Arabia.

II. SAUDI NATIONAL CULTURE

Saudi Arabia is the birthplace of Islam and part of an ancient civilization (Alkahtani, 2013; Abu Nadi, 2012). It has an ancient culture with a history extending several thousand years[5]. Therefore, the Islamic and Arabic traditions are revered and nurtured by Saudi citizens with great pride and satisfaction. The Islamic roots from which the Saudi culture stems, along with its time-honoured role as a centre of commerce and its Bedouin traditions, have moulded the very core of its heritage.

The Saudi society is a tribal system where the family and tribe are the basis of the social structure and are the most significant entity in the entire Saudi society (Maisel, 2015). Kinship and affiliation play an important role in all social relations and tribes carry a weighty impact on individual lives. Firm tribal loyalties exist within certain zones and tribal traditions and influences can have a heavy bearing on an individual's liberty when the tribe's reputation is at stake.

Indeed, Saudi Arabia's culture preaches a strong sense of loyalty to their family and tribe, yet provides a wide berth for individual tastes. Fostering durable, trust-based personal relationships is of the utmost priority to the majority of Saudis; these characteristics are inherited from Islamic teachings.

III. WOMEN IN SAUDI CULTURE

The segregation of men from women and their participation in the social, political and economic life are the hottest topics in Saudi Arabia and Western media. Some Westerners, according to Morris (2008: p.93), perceive that Saudi women exist behind imprisoning walls, cloaked and prohibited from the fruits of the free life enjoyed by Western women. They feel that women in Saudi Arabia are stripped not only of their beauty but of their position and their free speech amidst the Saudi hierarchical mandates (Morris, 2008). These Westerners take a superficial look at Saudi women's lives - their veils, the restraints placed on their mobility and suffrage.

Smith (1987), who is a Western feminist, claimed that the time-honoured absence and muzzling of women in Saudi Arabian public sectors lay at the root of the inequity of gender. As Doumato states, "Girls have been taught well in Saudi Arabia to follow a specific role, a role in which they were subordinate to men, but not enough to challenge it" (2000, p.93). However, these allegations reflect the lack of understanding of the Islamic culture and in fact the Saudi culture. Factually, the Saudi culture is either unknown to the Western media or they simply do not recognise it for what it is or try to understand it.

Western Media (and some Westerners) judge a Saudi woman's lifestyle according to their cultural criteria and standards. Their viewpoint is that Saudi women may not claim to be women unless they fail to bow to the prescribed standards of their traditions. They are considered to be devoid of femininity in the absence of comparable conduct to the Western female (Al-Tahlawi, 2008). This in fact reflects a substandard pattern of thought and a meagre level of understanding (Al-Bishr, 2008). Further, with such biased patterns of judgement they effectively ignore Islamic cultural values and beliefs and want others to simply emulate their own patterns. Consequently, the big debate about Saudi women and their veiled existences has been a controversial topic for political institutions and human rights organisations in the Western countries.

These parties have not, however, gone deep enough into the issue to ask themselves simple questions such as 'What is the historical background and the cultural values behind Saudi women and the wearing of a veil?' Wearing a veil can in fact be considered to be a surface manifestation of the Saudi culture. Although the reasons behind it can be easily understood, it appears to be very difficult to grasp by outsiders. Indeed, (some) Westerners and the Western media look at Saudi women with just a Western eye. This eye usually focuses only on the negative side of Saudi women when judging them; they ignore the luxuries that Saudi women enjoy socially, economically and in many other aspects of their lives.

In fact, Saudi women have contributed hugely to the revitalization and prosperity experienced by the Kingdom of Saudi Arabia recently. Many Saudi women are academicians, physicians, administrators and businesswomen (Wagemakers et al, 2012). At both national and international strata their influence is felt, just as it is felt in the field of healthcare and in the media. They are often counted amongst the finest minds in the banking and business sectors. They also enter the newspaper arena as journalists, correspondents and writers (Odine, 2012). Many are also novelists and poets.

Government, in Saudi Arabia, has assured numerous rights to Saudi women; freedom to receive an education, to employment, to welfare, to personal privacy and security, to the right to own and to medical support. Notably, Article 30 stipulated that the state would be dedicated to guaranteeing education to the masses and that illiteracy would be challenged in all citizens regardless of gender. In Saudi Arabia, therefore, women have (for example) the right to incomes which are comparable to men's, and may benefit from equivalent retirement prerogatives. Interestingly, in the US, according to Al-suwaidean et al. (2003) and Metcalfe [6], women receive 71% of men's salary despite having the same qualifications and competences.

To summarize, the Saudi Arabian state does in fact assert equality between women and men in all aspects of their lives, in its national regulations and policies and the Saudi culture deals with women and men on an equal basis. Consequently, if there appears on the surface to be an inequality between women and men, authors would account for this by shortfalls in the accuser's thinking, level of education, maturity and

perception of what the relationship between men and women should be.

IV. WOMAN LEADERSHIP

Although Islamic history is strewn with examples of women leaders since the 14th Century, leadership has been regarded in English literature in the early part of the last century as a masculine concept (Gedney, 1999). This has been particularly prevalent following the rise of the Great Man and Traits Theories. These concern themselves with the traits, characteristics and equalities of men as opposed to women.

Traditionally, the concept of leadership has been associated with masculine characteristics and traits such as power, domination, and assertiveness (Alomiri, 2015; Koenig et al., 2011; Gedney, 1999). Although there is no evidence that such characteristics are associated with true leadership, it appears that socially and culturally they have been.

According to Cummings (2005), who asked women executives to provide descriptions for female leaders, such leaders are: multi-tasking, emotional, strong, intuitive, compassionate, relationship-oriented, consensus-based, collaborative and gossipy. The same group provided a different list of adjectives to describe the male leader, including: strong, intelligent, powerful, dominant, assertive, focused, stubborn, and single-tasking.

Per Cummings, the nature of women is different than men in many aspects. Many women don't believe that they are capable, for example, of having an argument with someone at work and then going out to dinner with that person as if nothing had happened. In other words, women tend to 'hold a grudge' while men tend not to do so. Consequently scholars and practitioners usually associate leadership concepts with masculine traits and characteristics regardless of the leader's nature, whether it's a man or a woman. Further, the successful women leaders tend to have some very masculine traits. For example, Margaret Thatcher, the Prime Minister of Great Britain, is often considered to exemplify leadership traits and is viewed as having been self-assured, iron willed, resolute and bearing great determination; all of which are traditionally considered to be masculine traits.

Indeed, our culture has a huge impact on our perspective of leadership. It affects how women are prepared as leaders, and typically embraces masculine traits and characteristics. Therefore, those who explain leadership in terms of traits and characteristics may feel that anyone could become a leader if he/she has specific masculine traits and characteristic, regardless of their gender.

According to many studies (e.g. Mintzberg, 1980; Helgesen, 1995; Cummings, 2005), women tend to be more relationship-oriented, while men are more task-oriented. Therefore, a 'masculine style' tends to adopt an assertive and directive style with task-based behaviours, whereas a 'feminine style' tends to be interpersonal and democratic, with people-based behaviours. A female leadership style, according to Al Suwaidan & Bashraheel (2003), includes:

1. Working with the same effort but taking short and divergent rest

2. Being interpersonally oriented
3. Being democratic
4. Believing that visits and disturbances provide a good chance to understand subordinates' needs
5. Allocating enough time to her family
6. Building a relationship with people outside the organisation
7. Assessing every piece of work and considering the future effects on families, environment and education
8. Linking with her work but also linking with other things
9. Liking information exchange
10. Not liking working through organisational hierarchies; preferring instead to work through relationship networks
11. Being more efficient in problem-solving situations
12. Emphasizing the process

Al Suwaidan & Bashraheel (2003) claimed that although men and women share some common characteristics, there are also many differences:

Common characteristics (with men)	Women's characteristics (strengths)	Women's characteristics (weaknesses)
Adaptable	Tender	Compliant
Polite	Understanding (Appreciation)	Reliant upon others
Loyal (faithful)	Passionate	Temperamental
Committed	Sensitive	
Creative	Compassionate (merciful)	
Enthusiastic		
Competent		
Effective (efficient)		
Systematic		

Fig 1. Common characteristics between men and women, and women's characteristics

The dominating leadership style is a masculine style, since this has repeatedly been established as a successful and acceptable style during the last century. Therefore the easiest way for women to lead is to utilize a male style of leadership, especially in masculine organizational contexts, as the masculine style is a commonly accepted style of leadership. According to some researchers (e.g. Porat, 1991; Grove, 1999; Cummings, 2005), female attributes of nurturing, being sensitive, empathetic, passionate, caring and cooperative are associated with effective administration. Furthermore, other researchers, such as Helgesen, 1990 and Rosener, 1990, claim that female leaders, compared with male leaders, are less hierarchical, more cooperative and collaborative, and more oriented to enhancing others' self-worth; such behaviours, they say, make women excellent leaders. These characteristics, however, are innate and valuable within women. Therefore women can be creative and innovative in particular organisations that need such characteristics (e.g. those in the fields of education and health). Desvaux & Devillard (2008: 2)

claimed that most leadership behaviours that enhance corporate performance tended to be utilized by women more than men in team management. They measured, in their study, a company's organizational competence based on nine key criteria: Leadership team, Direction, Work environment and values, Accountability, Coordination and Control, Capabilities, Motivation, Innovation and External orientation.

They then determined how the above dimensions of organizational performance could be affected by leadership behaviours, basing their study on the work of Bass & Avolio (1990), as cited in Desvaux & Devillard (2008: 4): Participative decision making, Role modeling, Inspiration, Expectations and rewards, People development, Intellectual stimulation, Efficient communication, Individualistic decision making, Control, and Corrective action. In exploring how women contribute to organizational performance, Desvaux & Devillard (2008) explored these nine leadership behaviours, citing Eagly's (2003) findings that women used five leadership behaviours: People development, Expectation and rewards, Role model, Inspiration, and Participative decision making.

These five dimensions assist in strengthening the work environment and values, accountability and leadership team organisational performance dimensions. Therefore, those who believe that leadership is down to skill and who place emphasis on the process of the work rather than its products consider women to be well qualified as potential leaders. Furthermore, it is considered that if potential leaders learn these skills and processes well; they can contribute hugely to the overall organisational performance.

V. WOMEN WORKING AND LEADING, FROM AN ISLAMIC PERSPECTIVE

From the beginning of Islam, the main resource for Islamic teachings has been the Holy book (Quran). Although this resource has not been exposed to any changes over the last fourteen centuries and will not in the future, meanings and interpretations of the Quran is subject to the times and places of interpretation[7]. Consequently Muslim scholars in different Islamic countries have interpreted the Quran slightly differently.

Muslims who believe in gender equality always interpret the Quran as supporting such equality. In contrast, conservative scholars follow a more time-honoured fashion of interpretation, regardless of globalization, the media revolution, the social transformations, the demographic shifts and the economic waves of affluence that the country has passed through over the last few decades[8]. From an Islamic perspective, according to conservative scholars in Saudi Arabia, women are encouraged to remain at home. During the last fourteen centuries their kingdom has been their house, and their hijab (veil) has concealed them.

Conservative scholars in Saudi Arabia have cited (and interpreted) many verses of the Quran that support their claim that a woman should remain at home and serve her children and husband. They believe that 'women are required to dedicate themselves fully to nurturing the family environment

whereas husbands are expected to devote their energies towards furnishing the wherewithal for their families' survival' [9].

This view from conservative scholars about a woman's work or leadership position has also gained support from some Muslim scholars in other Muslim countries. Sayed Qutub2, for example, in his book 'International peace and Islam', as noted by ALsheha (2000), claims that:

"...the co-ed drags man and woman into sin and they drift towards moral decay. Such actions will definitely threaten the precious and holy ties between them and then there will be no room for trust and confidence in one another....".

Furthermore, ALsheha (2000: pp.99-100) has cited some Western views about women's right to work that support the conservative perspective. He points out that the well-known English writer, Lady Cook, says in New Echo:

"Men like (and prefer) the mixed environment. Thus, women are lured to something that conflicts with their human nature. The greater the co-ed. environment (between male and female), the more illegitimate children the society will have. There is the greatest disaster..."

He also cites one of the pillars of the English renaissance, Samuel Smiles, who wrote:

"The system that has required women to work in factories and industrial areas, regardless of the national wealth it brings, has destroyed the family life. It has attacked, in fact, the basic structure and foundations of the home and destroyed the essential pillars of the family. It has cut and destroyed social ties as well. Stripping the wife from her husband, and depriving children of their rights of proper, tender and maternal care, has resulted in lower moral values for the women. The real job and profession of a woman is to raise a good, sound and moral family. She is mainly required to take care of household responsibilities, home economics and other domestic needs."

This Western perception of a woman's domestic role as an innate right (fitrah) coincides with the Islamic one. The principle was further supported in Western newspapers' headlines during the 2011 'England riots':

'Proper parenting would have prevented these riots' (the Guardian)

'Poor parenting to blame for London riots, report says' (the Daily Telegraph).

Moreover, British Prime Minister David Cameron has admitted that British society is a 'broken society' and that:

"The 'moral collapse' and tackling the 'broken society' is back at the top of my agenda". (BBC, 15 August 2011). He added that he would "...speed up plans to improve parenting....".

Consequently, the nature of a woman and her function in the house of bringing up children is not one that merely provides safety and a means to construct her family; she will in fact produce ideal generations and build an ideal society who may then lead the country into prosperity and revival.

In fact, the Islamic perspective about women leadership does not deny her opportunities to undertake professional work, nor is it against female empowerment 3[9]. It is rather an

address to the Islamic concern about building a stable family that cultivates Islamic morals, ethos and values in its children in their early age, as "a stable family will produce a stable society".

VI. WOMEN WORKING AND LEADING, FROM A SAUDI CULTURAL PERSPECTIVE

Islam plays a pivotal part in delineating the country's culture and serves as a cardinal impetus in regulating the social standards, protocols, principles and credos which have been inculcated from birth by relatives and educational institutions. Saudis believe that Islam is not just a channel for worshipping God; rather, they believe that it is a comprehensive system which regulates their behaviour and embraces detailed prescriptions for the whole of life.

Saudis might be grouped into two categories:

Pure Saudis. These are conservative families who have been fully educated in Saudi Arabia and haven't had the opportunity to live or work in Western countries. These cohere with Islamic teachings, rules and principles and pride themselves on having achieved a harmony between the Islamic beliefs and principles and their culture toward women's roles, responsibilities and duties. Their perception about women's leadership is consistent with the Islamic one. Although they believe that the main role for Saudi women is to bring up their children and maintain their family structure (Metcalf 2008b; Ramadan 2009), they are not against women working if the work is guided by Sharia (Islamic) law.

Those who have been educated in Western countries and have embraced Western thought. These believe that there is inequality between men and women and feel that women should challenge gender inequalities, break the mould and disregard their disparities of class and culture. Such thinkers believe that these women should unify and fraternise in a bid to prevail over male social supremacy. They have tried to challenge some Islamic values such as gender segregation by mobilising resources for a collective action. According to Hamdan (2005), Saudi women in general have faced a cultural and traditional gender bias over the last century in all areas of life, not merely in the field of leadership, and in Saudi Arabia they have been absent from public life (Metcalf, 2008; Teitelbaum, 2011).

VII. BARRIERS TO WOMEN WORKING IN THE SAUDI ENVIRONMENT

The foregoing discussion has highlighted some of the barriers to women's work, from an Islamic prospective. Some of these barriers concur with Saudi national culture that restricts and limits such work. In fact there are many barriers facing a woman's work in Saudi Arabia on, structural, cultural and individual levels [11].

At a structural level, labour inequalities are prevalent in Saudi Arabia, where according to UNDP (2009) and AlMunajjed[12], the rate of women's labour market participation is one of the lowest in the region. In 2007, according to AlMunajjed[13], the active workforce in Saudi

Arabia reached 8.2 million people; yet just 14.4 percent of the nationals in the labour force were women. Furthermore, the unemployment rate of women in the Saudi labour force in 2008 was 26.9[14]. One of the reasons behind this was that there were no options for the majority women to find work other than in the fields of education and health. Until recently in Saudi Arabia, women have been barred from certain professions, such as engineering, politics and architecture. Furthermore, training and development opportunities, according to Metcalfe [15], disadvantaged women in the state.

At a cultural level, the main obstacle to female employment is the Saudi philosophy toward men and women's lifestyles. Both genders are expected to agree with the Islamic perspective with regard to their responsibilities and duties wherein men should financially support women. Another factor that limits women's opportunities to work is the gender segregation. This factor reflects the need to create a moral work environment. Therefore, there is reluctance by private sector organisations to employ women, partly due to social norms and partly due to additional costs that may be incurred for creating such a work environment [16]. Furthermore, the restrictions placed on women's mobility within the country are another factor that has limited their work in different areas.

At an individual level, the majority of women believe that their main roles and responsibilities are strongly related to Islamic beliefs (Ramadan, 2009). Further, Saudi women believe that men's abilities to lead are superior to theirs. Mammout (2009) conducted a study of gender role stereotyping at Prince Sultan University in Riyadh using the Schein Descriptive Index (SDI) to evaluate perceptions of leadership effectiveness. The study found that men perceived that they possessed more requisite managerial characteristics than women. Interestingly, women also believe that men have more appropriate skills and abilities than they do. It could be concluded, then, that the Saudi culture has stereotypical masculine qualities and that the Saudi culture coheres with Islamic beliefs.

VIII. EMPOWERMENT OF SAUDI WOMEN

Although, from an Islamic and cultural perspective, Saudi women are, to some extent, encouraged to remain at home serving their children and husbands, this doesn't mean Islam or Saudi culture forbids women from working - as long as it is controlled by Islamic Sharia. According to ALsheha (2000), Islamic law does not deprive a woman from the right to work. Islam permits a woman to conduct her own business and financial issues. These businesses, however, must not conflict with her main responsibilities and duties at home (ibid). Furthermore, her work must be in a female environment involving no physical contact with men.

Islamic history is strewn with examples of women leaders since the 14th Century. According to (Ghadanfar, 2001):

'Muslim women achievements and influence are found in every sphere of momentous periods in the history of the world. ...They were in politics, were as courageous in war as in the peaceful and persuasive propagation of the teachings of Islam.

...They were to be found in the political arena, in the field of education, in the courts of Islamic jurisprudence, in the interpretation of Sharia, in trade and commerce, in agriculture, in medicine and in nursing. In short there was no sphere that did not benefit from their intellect, their wisdom and their gentle yet firm strength of character'.

In Saudi Arabia, with the dawn of the King Abdullah era in 1995, the women issue was treated differently. The King had the strategy and vision to promote women's rights in the state. In 1999, for the first time in Saudi Arabia's history, the government allowed twenty women to attend the Consultative Council session. This initiative paved the way for women in the state to penetrate into the public sphere.

Five major events, according to Al-Dabbagh[17], followed at the beginning of the new millennium: King Abdullah's "National Dialogue" in 2003, the Municipal elections in 2003, the Chamber of Commerce elections in 2004, the establishment of the first women's university in Saudi Arabia (the largest women-only university in the world - Princess Nora University) in 2007, and the appointment of a woman as an assistant undersecretary for the Ministry of Education in 2009.

Although these five events were not a comprehensive reform, nor what women sought in the state, they nevertheless demonstrate how the Saudi society can accustom itself to seeing women in a leadership position.

The National Dialogue in 2003

A conference held under Abdullah's auspices in 2003 grouped the religious leaders of different confessional groups. One of the main sessions of this conference discussed "women rights and duties". The main aim of such a session was to expand the role of women in public life.

The Municipal Elections

In 2003 the elections, which covered half the seats of the municipal councils nationwide, were announced. It was the first time that the Saudi government had introduced the word 'election' in their dictionary. Some commentators considered it to be a historic moment in Saudi political culture. This announcement, however, made it clear that women were not eligible to participate. Eight years after this announcement, in 2011, the government announced that they would allow its female citizens to vote and run for office in the municipal elections, starting in 2015 (Arab News, 2011).

Chamber of Commerce Elections

In 2004, one year after the original announcement about the municipal elections, the Saudi government allowed women to participate in broad elections for the Chambers of Commerce and Industry. In the Western province and Jeddah, two women were elected in these two cities, whereas no women won in other regions. Regardless of this failure to win, it was a groundbreaking opportunity for women to participate in an electoral process.

Princess Nora bint Abdurrahman University

Women's education has known a great deal of care in the King Abdullah era. This is further evidence of the empowerment of women in the state. Princess Nora University is the largest women-only university in the world, with twelve colleges servicing 50,289 students in the bachelor program, 371 in the doctorate and 432 in the Masters.

Appointment of a woman as an Assistant Undersecretary in the Ministry of Education

In 2009 the government announced the appointment of the first female in the Ministry of Education as the Deputy Education Minister for Girls' Affairs. It was a huge change in the Saudi political culture. Many Saudis were heartened by this appointment, especially women. A female educator, quoted in Arab News (the Saudi Newspaper) said, "This is a successful step. We've always suffered from having a man occupy the position. A woman knows what problems and challenges her peers face. It's a change for the better". This summed up the general reaction to this breakthrough.

These five reform initiatives have engaged women in unprecedented opportunities which have emancipated women in Saudi Arabia from the isolation to which they've long been subjected to over the last century into actual participation in the cultural renaissance that the Kingdom of Saudi Arabia is currently undergoing. Furthermore, it demonstrates how these nascent government initiatives can play a monumental role in empowering women in the Saudi environment. Such initiatives illustrate how shifting political, economic and social factors can combine to form a pivotal dimension in forming Saudi women's future, permitting them to play a vital role in building a successful society.

IX. INCENTIVES FOR WOMEN WORK AND LEADERSHIP IN THE SAUDI ENVIRONMENT

- Appointment of the first female in the Ministry of Education as the Deputy Education Minister for Girls' Affairs, which was considered a huge change in the Saudi political culture (2009)
- Although women's education was granted to Saudi women as late as 1970, the dramatic advances in education have grown rapidly over the last 5 years. Women's participation equalled men's in 2003 (Kingdom of Saudi Arabia, 2003), while in 2007 there were more women than men. According to the Central Department of Statistics & Information in the KSA (2012), graduating male students from universities numbered 44,767 (43%) whereas graduating females came to 59,022 (57%).
- Expansion of the role of women in public life and discussion of women's rights and duties in the National Dialogue (2003)
- Establishment of the Businesswoman Committee in 2002 with the support of Princess Adelah bint Abdullah bin Abdul Aziz; in 2005 this became a Centre for businesswomen. The centre provides training in a broad range of areas including: public

relations; computer skills; management of social services; management of voluntary associations; banking skills and capabilities [9].

- Women were elected to municipal councils for the first time in 2015.
- Establishment of the King Abdullah University of Science and Technology with mixed genders, allowing women to enter all professions (2009).
- Establishment of the largest women-only university in the world (2007);
- Saudi government allowing women to participate in broad elections for the Chambers of Commerce and Industry (2004) which supported the development of businesswomen and professional women
- The Chambers of Commerce and Industry calling for:
 - A human resource development fund to provide special training of Saudi women and employment of them in training programs;
 - Permission of women to work in stores selling women's goods;
 - The request for the Ministry of Labour to co-ordinate with the Ministry of Public Services and Social Affairs and the Ministry of Economy and Planning to establish an integrated plan for Saudi women workers and to identify the real needs of women workers;
 - The Ministry of Labour, Ministry of Trade and Industry, and Council Offices investigating maternity leave provisions with a view to providing further benefits in a manner which does not prevent their employment.

There have been, then, some remarkably successful achievements in furthering the empowerment of women in Saudi Arabia. Furthermore, these breakthroughs have granted powerful political, social and civil rights to Saudi women, with political participation being one of the most significant rights that Saudi women have gained to date. In the last few years, Saudi women have proven that they are qualified to hold leading positions, and becoming fully involved in Shoura has helped them to gain their social, political and civil rights (Arab News, 2015). Furthermore, fifteen female Saudi CEOs who broke new grounds in the social, educational, economic, political and cultural fields have been named in the list of the world's 100 most powerful Arab women, published by CEO Middle East (2013). The highest Saudi entry was second-place Lubna Olayan, while Princess Ameerah Al-Taweel and Mona Al-Munajjed ranked third and ninth, respectively.

X. CONCLUSION

The purpose of this study was to examine Saudi women in Islamic and Saudi culture and their effect on their leadership positions in a Muslim society. It is true that the law and the male-dominated society do not provide a good environment for leadership positions of women; women are, nevertheless now more willing than ever to take the risk and empower themselves, overcoming all barriers in the process.

According to the literature studied, Saudi women have contributed hugely to the revitalization and prosperity experienced by the Kingdom of Saudi Arabia. Many Saudi women are academicians, physicians, administrators and businesswomen. Their influence is felt at both national and international levels, just as it is felt in the field of healthcare and in the media. They are often counted amongst the finest minds in the banking and business sectors. They also enter the newspaper arena as journalists, correspondents and writers.

Several conclusions and recommendations can be drawn from this literature review on women leadership. First, the underrepresentation of female leaders is a global phenomenon where, for example, only 22 per cent of all national parliamentarians were female in 2015, and only 17 per cent of government ministers were women (UN Women, 2015). These figures might be because of difficulty balancing family responsibilities with work demands, organizational factors, and gender stereotypes, all of which can serve as major roadblocks for females seeking leadership opportunities at different organisational levels. In the Saudi Consultative Assembly, however, women represent 20 per cent of its total number, which is more than America's House and the Senate council (19.3 per cent). This highlights the dramatic improvement in female status in Saudi Arabia.

Second, it has been argued that gender-segregation may be a barrier to female career advancement in the state. On the one hand, researchers indicated that segregation between genders might limit opportunities to hold a leadership position, as such a position requires a degree of mixing, if only to discuss an issue. On the other, researchers have claimed that gender-segregated organizations are able to provide females with leadership opportunities in Saudi Arabia.

Third, developing female leadership trends in Saudi Arabia are a significant outcome from this literature. Saudi women are gradually being empowered in order to fully participate and contribute to the progression and modernization of the country. Therefore, many initiatives have been adopted over the last ten years to support women participation in the social, political and economic life, including appointment of the first female in the Ministry of Education, participation in municipal councils, and participation in elections for the Chambers of Commerce and Industry. For this reason, female leadership development should be extended to college students that will equip them with the capacity and competencies needed for career advancement.

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RAISING STANDARDS OF TEACHING AT A UNIVERSITY IN SAUDI ARABIA USING METHODS OF ACTIVE LEARNING

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Abstract

This paper explores the issue of teaching methods used at universities in Saudi Arabia and reports on a study into the implementation and effectiveness of 'active learning' techniques. While group and collaborative learning methods have long been used in such disciplines as the medical and physical sciences, many other courses and subjects at Saudi universities have continued to be taught in the traditional lecture format (albeit with the aid of computers and other technologies). But while lectures have some advantages they are not always an effective way of fostering learning, and they usually entail students being passive learners working in relative isolation. Not all educators are convinced of the value of other teaching approaches, and some prefer to continue to use traditional methods. Consequently, with the aim of helping elevate the quality of teaching in Saudi Arabia a project was undertaken to evaluate methods of 'active learning' that have been used for several years at a university in the city of Makkah. Several academics and students participated in a study in which active approaches were used in the teaching of undergraduate courses. Both qualitative and quantitative methods were employed to conduct and appraise the study; the results strongly confirmed the benefits of active learning, though they were by no means definitive. Indeed, while a majority of participating students found that the methods enhanced their learning, nevertheless a significant proportion reported that the approach made little difference to their ability to learn.

Keywords: Active learning, educational methods, learning strategies

INTRODUCTION

Saudi Arabia is a very conservative country in which traditions and customs are firmly entrenched. This conservatism is reflected in most aspects of life, including education, and the research project reported here must be seen within the context of a major national effort to elevate the standards and quality of the educational system at all levels. This project was undertaken because the traditional approach to teaching by way of lectures continues in common use in many courses in Saudi universities (Hamdan, 2014). Yet, in many other developed nations more active approaches to learning are being adopted, these being considered to be more effective for fostering learning by students (Richardson, 2005). Active learning (AL) does not just apply to the use of physical activities: rather, it refers to any form

of educational method by which the learner actively participates and is involved in the educational process. It has been defined as any instructional method that engages students, that entails students doing meaningful learning activities, and requires students to take active responsibility for their own learning instead of being merely the passive recipients of information (Prince, 2004, p 1). It is an approach that“

*... requires students to regularly
assess their own degree of
understanding and skill at handling
concepts or problems in a
particular discipline. The
attainment of knowledge by
participating or contributing. The
process of keeping students
mentally, and often physically,
active in their learning through
activities that involve them in*

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*gathering information, thinking,
and problem solving" (Collins &
O'Brien 2003).*

The term can refer to subjects and topics at all levels, but today it more commonly applies to educational approaches used at tertiary levels (Lewis, 2004). An objective of AL is that it requires students to engage in activities such as analysis and evaluation, all of which entail higher-order thinking. It describes methods that encourage learners to think critically about content, and it benefits learners by providing challenging situations that may involve evaluative, problem solving, or reasoning skills (Lewis, 2004; Prince, 2004; Collins & O'Brien, 2003).

Expositional and didactic approaches to teaching are often predicated on the assumption that all students can adequately acquire learning by listening and making notes, and that they need the same information at the same time and place in a one-way information transfer. But listening to a lecture is only of value to students who learn best by listening (Silberman, 1996; Weiner 2002; Chance 2005), and AL is in marked contrast to such methods. However, despite its reported benefits (Millis & Cottell, 1998; Cranton 2012; McKinney 2012) AL it is not always practiced by teachers (Lewis, 2004). Lecturing continues in common use because it is a quick way of transmitting a large amount of information, and it may not require much preparation by the lecturer. However, researchers such as Bangert (2004) argue that it is an inefficient technique because the learners remain relatively inactive, cannot always retain the information, or become inattentive; instead, he argues that students need to do more than just listen - they must be participators by writing, discussing, reading, or being otherwise engaged in solving problems. A feature of AL is that it is largely student-centred; the student takes responsibility for managing his/her own learning program, and according to Kuh (2008), widespread literature has established the value of active, engaged, and collaborative methods of learning for students (Baeten et al, 2010; Robinson, 2011).

Active Learning

AL can take a number of forms, and examples include practical tasks, collaborative learning, case studies, peer learning, enquiry-based learning, and project-based learning. Many of these activities involve groups. Described variously as collaborative, cooperative, or peer learning, they can refer to any tasks or methods in which students work together in small groups on a common issue (Millis & Cottell, 1998). Similarly, many activities require learners to address problems that are introduced at the beginning of the session and then used to provide the motivation and context for the learning activities that follow (Wood 2003; Armstrong 2008; Yew & Schmidt 2011). Typically, the problem to be solved is a vehicle for stimulating cognitive processes and for reinforcing principles, practices, or other subject details.

The literature contains a number of studies in support of AL techniques (Cranton 2012; McKinney 2012). Reporting on a survey of 6,000 physics students, Hake (1998) noted that students in classes where AL methods were used achieved significantly higher scores on a standard test of physics knowledge than students who attended traditional, lecture-based courses. Similar results for students of physics were also stated by Hoellwarth and Moelter (2011) who reported that learners who used AL improved by 38 percentage points when evaluated on a standardised test. Michael (2006, Table 1) and Michael and Modell (2004) listed a number of AL approaches such as enquiry-based learning, discovery learning, and technology-enhanced learning which have been demonstrated to yield markedly higher levels of learning in the medical sciences. Baldwin (2014) concluded that AL should be a key element of all tertiary courses, and other supportive research is provided by Walker (2003) who examined the influence of AL on critical thinking, and Hackathorn et al (2011, p 40) who found that "In-class activities led to higher overall scores than any other teaching method while lecture methods led to the lowest overall scores of any of the teaching methods."

Despite the evidence and the arguments provided by writers such as those cited above, some educators at university level still avoid using AL methods. Lewis (2004) suggested inertia and resistance by older academics, and Prince (2004, p7) concluded that "...tyranny encourages faculty to push through as much material as possible in a given session". Plush and Kehrwald (2014) note that there are practical impediments, especially for younger tertiary-level teachers. The authors observed that some teachers may themselves have only experienced the traditional lecture format and may not be adequately supported while developing their own teaching style (Plush & Kehrwald, 2014). While concluding that, overall, several techniques for AL enhance learning, Prince (2004, p 7) acknowledges that the purported improvements resulting from some methods of active engagement are doubtful. He notes, for example, that there is little evidence to support the claim that group discussions lead to improved learning, and he states that team activities can diminish individual responsibility and effort. He comments, too, that problem-based-learning is unlikely to improve students' test scores but that it positively influences student attitudes and study habits (Prince, 2004, p 7).

In the light of these varying results it is important now to consider the relationship of AL to the current theories of learning.

AL and theories of learning

The use of AL is concordant with various pedagogical theories, principles, and concepts that have been developed over the years. Traditional theories of learning, and the use of didactic methods, considered knowledge to be a commodity capable of being transmitted by simple and direct means (Bransford et al. 2006), and when learned it could then be reproduced. In contrast, AL is founded on the theories of knowledge as something each learner constructs or creates afresh rather than something that is absorbed and memorised in its pre-existing form (Greeno, 2006; Sawyer, 2006).

It is not possible here to review all recent learning theories, but many forms of AL entail

collaboration through group activities on the premise that people learn from each other, and writers such as Vygotsky (1962, 1976), Bandura, (1986) and Ormrod (2008) have proposed social learning theories to explain how people learn in social settings. That is, learning is a cognitive process that occurs within social contexts where cognition, environment, and behaviour all influence each other to foster understanding. Social process concepts suggest cooperative strategies (Schunk

2008) that enhance deeper knowledge construction underpinned by student discussions; they also build active learning communities out of small, group-based instruction.

AL methods also meet the tenets of constructivism, which is an important paradigm for learning processes. This model depicts learning as the result of 'constructed' understanding. For instance, Driver et al. (1989, 2007) and Duffy et al (2012) expound the view that knowledge must be constructed by the mental activity of learners who construct meaning from previously-acquired information. Teaching should provide active learning environments that, in turn, produce interpretable experiences and facilitate knowledge construction. The construction of meaning is facilitated by making multiple links between the information being acquired and the existing store of information. Information and meaning (whether old or new) are assembled into mental models or representations which are the basis of learning.

Additionally, it is pertinent to consider experiential learning theory which is very relevant to AL because it confirms the importance of personal involvement and practices in building knowledge (Kolb & Kolb 2008; Moon 2004). This theory highlights the value of AL because it shows that learners are better able to construct knowledge and understanding by way of participation and by the opportunity to reflect on what they have done. The theory views learning as an on-going process (Dewey, 1897, 79; Sawyer 2006), as an opportunity to re-learn, as the resolution of conflicts between different ideas and concepts, and as the creation of knowledge – an approach that is fundamentally different from the traditional 'transmission' model whereby pre-

existing information is conveyed to the learner (Pashler et al, 2008).

These and other current theories confirm the need for teachers to develop approaches which are more effective for constructing learning, but modern theories and practices can be slow to be recognised and so before detailing the project conducted in Saudi Arabia it is important now to outline the current Saudi education system of that country.

Education in Saudi Arabia

The research reported here represents one aspect of the Saudi government's programme for elevating the nation's educational methods and standards at all levels. Saudi traditions and conservatism are reflected in the educational system, and AL is a method relatively new in the Kingdom, particularly to the tertiary sector, even though the educational system has developed very rapidly over the past fifty years (Bahgat, 1999: Country Studies, 2006).

Traditional views of education have, in the past, resulted in students giving precedence to their Arabic values and to Islamic studies, and until recently many graduates were ill-prepared for employment or careers. At tertiary levels much has changed in recent decades and many courses make greater use of laboratory and research techniques of learning. Nevertheless, despite these improvements, too often courses are taught by means of traditional lecturing methods, as described by House (2012) and Johnson (2009, p24); "... teachers encourage a system of ineffective memorization and a superficial understanding of facts for the sole purpose of passing a test. This type of education extends ... to the college and university levels. Students are continuously taught of ways to pass an exam rather than the proper approaches to learning". The urgent need to promote more effective ways of learning and to encourage the adoption of better methods form the backdrop and the reason for the enquiry reported here.

While conservatism remains strong, for the past decade or so there has been a vigorous debate regarding the scope, content, and methods of education (Alsadaawi, 2010). Traditional

approaches to teaching have been challenged, the government acknowledging the need to develop and reform the state education system as a key component in the nation's economic development plans (Yamani, 2006). Consequently, the government has invested heavily in educational institutions, but this strategy increased the number of graduates quantitatively not qualitatively, as Saudi universities continued to produce less than capable graduates, adding to the ranks of the unemployed (Bosbait and Wilson, 2005). Indeed, as explained by Alsadaawi (2010) there has been agreement among educators, researchers, and policymakers that the Saudi education system has not been achieving best practices or standards. The educational challenge facing the country has been the need to prepare students for a competitive workforce by emphasising the quality of teaching in all disciplines through the adoption of best practice in teaching and learning methodologies.

In response to the Saudi government's programme of educational improvement this project was conducted to demonstrate that AL offers a more effective approach to learning.

RESEARCH AIMS

The questions posed for this research were:

1. Which AL strategies do students at a university in Saudi Arabia find most useful?
2. What are the perceptions of students with regard to how AL strategies affected their learning?

METHODOLOGY

The interpretivist aspect of this work is based on the theoretical belief that reality is socially constructed and fluid within cultures, social settings, and relationships with other people. Moreover, there can be multiple, valid claims to knowledge (Guba & Lincoln, 1994, pp 105-117). Interpretivism has a long tradition in the social sciences and interpretivists aim for a detailed description and understanding of the phenomenon under investigation by way of observation and involvement (Bryman, 1994:

Saunders et al, 2007). This philosophical approach is reflected in the qualitative methods adopted and aims to provide an insight into organisational and social processes as well as on the way people think and behave (Creswell, 2013).

Research method: questionnaires, interviews, and focus groups

The mixed methods selected for this investigation included questionnaires, interviews, and focus groups, and together these methods produced a range of triangulated data that addressed issues of validity and reliability. From an ontological point of view, this study was based on the assumption that “people’s knowledge, views, understanding, interpretation, experiences and interactions are meaningful” (Mason, 2002:63). Additionally, the use of interviews allow for social exchange to construct “depth, nuance, complexity and roundness in data” (Mason, 2002:65), and focus groups provide the researcher with the perceptions of the participants regarding active learning (Korpel, 2005).

Focus groups are very useful for understanding people’s perceptions and thoughts about a phenomenon. The participants are selected based on common characteristics and their links to the research topic (Greenbaum, 1998; Krueger and Casey, 2000). It has the advantage of yielding differing experiences, and the cross-current of views can prompt unexpected information. However, it too can be difficult to analyse, it may suffer from bias, and it requires a skilled facilitator (Krueger & Casey, 2000; Creswell, 2012).

The research site

The site for this investigation was the College of Engineering, the College of Computer Science, and the Business School at Umm Al Qura University in Saudi Arabia. All ethical issues and research protocols were addressed. Approvals were obtained from the University of Plymouth and from these three colleges for the researcher to recruit student participants who had completed their first year of study. All approvals were granted in writing, and the initial step involved the deans distributing the questionnaire to participants by way of teachers in the respective colleges.

The subject

Commencing in 2010 several sections of the three colleges had adopted AL methods – though it must be noted that most departments and faculties within the university continued to apply their existing methods of instruction. This project surveyed both students’ experiences of classes in which AL methods were applied, and the experiences and views of the teachers who had implemented AL techniques. The researcher did not conduct or otherwise influence the nature or scope of existing AL approaches; rather she aimed to assess the educational worth of the system being used. This survey sought to identify which techniques (if any) benefited or hindered the ability of students to learn the required topics and subjects. The following aspects of the AL program were evaluated by the questionnaire, interviews, and group discussion:

- Classroom arrangement
- Group-work methods
- Learning activities
- Learning processes
- Educational development
- Personal and educational outcomes.

The sample

Two samples were selected for this enquiry – students and teachers.

A sample of student participants (Table 1) was selected by means of probability sampling, a technique which entails some form of random selection to ensure a representative cross-section (Landreneau, 2005). The limitation was that the participants must have completed the first year of their course. The participants were aged between 18 and 20. The questionnaire was designed for male and female respondents but ultimately only male students were allowed to participate.

Table 1: Classification of college students in our sample

	College of Engineering	College of Computer Science	Business School	N
Samples	88	38	63	189
Participants	76	27	62	165
Response rate	86%	71%	98%	87%

The questionnaire

A first draft of the questionnaire was compiled, then piloted and refined. The questionnaire comprised 35 questions divided into seven categories, and it was sent to all participants. One hundred and sixty five responded (87 percent). The initial questions were quite simple to make respondents feel comfortable and confident. The language was formal, but easy to understand, and the response boxes and scales were clearly laid out and unambiguous. A five-point Likert-type scale was used for recording the responses.

Focus group

Three teachers from the 32 respondents (who had been nominated by the head of the active learning program) were chosen for a group discussion. The facilitator (who was not the researcher) posed several prepared questions in order to initiate discussion, but then participants were invited to contribute comments, experiences, and ideas. The one-hour discussion was audio-recorded (with approval) for later analysis.

Interviews

Thirty-two teachers were invited to be interviewed. Two student representatives, selected randomly from the cohort, were also interviewed. The duration of the audio-recorded interviews was approximately 45 minutes and were conducted in a meeting room at the Business College. The interviews were semi-structured, the interviewer asking eleven prepared questions

which focussed on the use and effectiveness of AL, but also inviting comments and any other relevant information. All of the interviewees were asked the same questions in the same manner. Non-threatening questions were used to begin with to put the interviews at ease. The questions were designed to confirm or complement the questions in the questionnaire.

Reliability and Validity

The value of a research project depends largely on reliability and validity. The former refers to the degree to which the methodology produces stable and consistent results and is able to yield the same or compatible results in different clinical trials (Cohen et al 2007; Creswell 2003). In this investigation reliability was ensured by means of using different people to assist in the preparation of the questionnaire and the interview questions, the use of another person as facilitator for the interviews and group discussions, and using different raters to appraise the participants' responses. Research validity applies to both the design and the methods of data collection and it means that the findings truly represent the phenomenon they claim to measure (Creswell 2003; Silverman 2011). In this project internal consistency reliability were ensured by the use of Cronbach's alpha. This measure is a coefficient of consistency between variables and is written as a function of the number of test items and the average inter-correlation between them. It is widely used in qualitative research and is regarded as a good indicator of consistency (Allen & Yen, 2002).

Alpha can have values between 0.0 and 1.0; (DeVellis, 1991). in general values below .65 are undesirable, .65 to .70 are acceptable, .70 to .80 are good, and above .80 are considered to indicate high levels of validity.

RESULTS

The setting

Unlike the formal arrangements typically used in lecture halls, the AL program used informal seating that facilitated group work. Table 2 summarises the experiences of the students in response to this system. It can be seen that a

majority (83 percent) felt that the informal arrangement was beneficial. It can also be seen that most (53 percent) found group work to be a

helpful way of learning – though the result was not particularly strong.

Table 2: Informal classroom arrangement

The items	Vary Useful	Useful	No difference	Not Useful	Not very useful	Total
Informal classroom arrangement	83 (50.3)	54 (32.7)	13 (7.9)	6(3.6)	9(5.5)	165 (100.0)
Working in small groups	58 (35.2)					

Learning activities

To discover which activities they preferred, students were asked to indicate which activity they found to

be useful. As seen in table 3 most students reported positive experiences of learning by interacting with other students and with the tutor.

Table 3: The learning activities

The items	Very Useful	Useful	No difference	Not useful	Not very useful	Total
Learning by discussion	68(41.2)	50(30.3)	28(17.0)	10(6.1)	9(5.5)	165 (100.0)
Learning through personal research	63(38.2)	43(26.1)	36(21.8)	13(7.9)	10(6.1)	165 (100.0)
Learning by interacting with the tutor	76 (46.1)	40(24.2)	30(18.2)	6(3.6)	13(7.9)	165 (100.0)

The majority of respondents (71.5%) reported that learning by discussion with peers was beneficial, and about the same proportion (70.3%) found it helpful to interact with the tutor. However, an interesting response was evident here because 62.3% also stated that they learned through personal research. It appears that these responses were not contradictory; rather, they were complementary insofar as there are occasions when peer-assistance can be helpful but at the same time students learn much from private study.

The learning process

The respondents were asked to indicate the usefulness of nine AL activities. Table 4 summarises the learning process activities. Perhaps the most distinctive feature of this table is that there was considerable consistency between the results of the different AL techniques.

Table 4: The learning process

The items	Very useful	Useful	No difference	Not useful	Not very useful	Total
Keeping a reflective journal	60 (36.4)	51 (36.4)	30 (18.2)	17 (10.3)	7(4.2)	165 (100.0)
Discussion in small groups	68 (41.2)	49 (29.7)	28 (29.7)	11 (6.7)	9(5.5)	165 (100.0)
Individual research	67 (40.6)	48 (29.1)	33 (20.0)	11 (6.7)	6(3.6)	165 (100.0)
Doing presentations to class	65 (39.4)	45 (27.3)	31 (18.8)	17 (10.3)	7(4.2)	165 (100.0)
Writing essays and/or reports	70 (42.4)	40 (24.2)	38 (23.0)	9(5.5)	8(4.8)	165 (100.0)
Feedback to class	70 (42.4)	46 (27.9)	31 (18.8)	13 (7.9)	5(3.0)	165 (100.0)
Completing worksheets	64 (38.8)	52 (31.5)	31 (18.8)	10 (6.1)	8(4.8)	165 (100.0)
Watching power point presentations by the tutor	69 (41.8)	43 (26.1)	28 (17.0)	9 (5.5)	16(9)	165 (100.0)
Handouts to class/checklists	52 (31.5)	64 (38.8)	29 (17.6)	12 (7.3)	8(4.8)	165 (100.0)

That is, for all of the methods over two-thirds of students reported that their learning benefited. The methods that apparently yielded least benefits were essays and reports (66.6%), and the most helpful was discussions (70.9%). It is also pertinent to note that while the use of a journal scored highly (72.8% reported a benefit), a relatively high proportion (14.5%) stated that the journal was of no educational value. The methods for which there was least support, and which about one-third of participants found to be of no value, were the journal, student presentations, and power-point presentations by tutor.

Educational development

Students were asked to score the benefits to their own learning as a result of the active learning techniques. In comparison with the results of Table 4, the personal educational benefits recorded in Table 5 were noticeably lower. Considered overall, the majority of respondents stated that they received positive learning experiences from AL, though the scores were clearly lower than in the previous table.

Table 5: Educational development

The items	Very Useful	Useful	No difference	Not Useful	Not very useful	Total
Improved your ability to understand the course material	50 (30.3)	45(27.3)	37(22.4)	10(6.1)	23(6.1)	165 (100.0)
Made you aware of your own responsibility in the learning process	47 (28.5)	46(27.9)	37(22.4)	20(12)	15(9.1)	165 (100.0)
Enabled you to analyse problems more effectively	68 (41.2)	49(29.7)	32(19.4)	9(5.5)	7(4.2)	165 (100.0)
Helped you to find solutions to problems more effectively	48 (29.1)	58(35.2)	37(22.4)	14(8.5)	8(4.8)	165 (100.0)
Improved your communication skills	59(35.8)	37(22.4)	49(29.7)	11(6.7)	9(5.5)	165 (100.0)
Improved your level of confidence	53 (32.1)	51(30.9)	41(24.8)	14(8.5)	6(3.6)	165 (100.0)

The greatest reported benefit was that AL enabled the students to analyse problems more effectively (70.9 percent). The positive scores for 'personal responsibility for learning' (56.4%) and 'improved understanding of course material' (57.6 percent) were recorded by more than half of the respondents, but these were by no means strong endorsements of AL. Indeed, the fact that so many (43.6%) did not acknowledge increased personal responsibility for their own learning as a result of AL appears to somewhat contradict the claims of other writers (cited above).

Skills

Many aspects of learning entail the acquisition of skills of different sorts. Students were asked which of the skills that they learned were most useful with respect of making presentations. Table 6 shows that considered overall, more than half recorded benefiting from AL, though the figure was not particularly high, with less than about two-third of the respondents reporting that the skills they learned were of benefit when preparing and conducting presentations.

Table 6: Skills

The items	Very Useful	Useful	No difference	Not Useful	Not very useful	Total
Research skills	69 (41.8)	25(15.2)	46(27.9)	12(7.3)	13(7.9)	165 (100.0)
Planning skills	47 (28.5)	59(35.8)	37(22.4)	14(8.5)	8(4.8)	165 (100.0)
I.T. skills	63 (38.2)	45(27.3)	37(22.4)	13(7.9)	7(4.2)	165 (100.0)
Public speaking skills	58 (35.2)	53(32.1)	33(20.0)	12(7.3)	9(5.5)	165 (100.0)

While these figures confirm the value of AL, nevertheless it is surprising that the proportions are not higher considering that research, planning, and IT skills are central to many courses undertaken by tertiary students.

Class discussion

Discussions in various formats are often used in AL situations. In this instance students were asked what they had gained from class discussions. From table 7, it is appear that the majority of respondents recorded experiencing positive benefits from group discussions of class topics and problems.

Table 7: Class discussion

The items	Very Useful	Useful	No difference	Not Useful	Not very useful	Total
Made you aware of other points of view	64 (38.8)	42(25.5)	35(21.2)	13(7.9)	11(6.7)	165 (100.0)
Helped you to argue a point effectively	56 (33.9)	48(33.9)	39(23.6)	16(9.7)	6(3.6)	165 (100.0)
Improved your communication skills	59 (35.8)	42(25.5)	41(24.8)	15(9.1)	8(4.8)	165 (100.0)
Helped to develop analytical skills	65 (39.4)	46(27.9)	29(17.6)	12(7.3)	13(7.9)	165(100.0)

The highest score was for 'development of analytic skills' (67.3 percent), and this might be expected because analysis is such an important part of many academic subjects. Yet a high proportion (15.2 percent) said that their analytical skills had not been helped by AL methods. Interestingly, only 61.3 percent reported that AL benefited their communication skills, yet good communication is such an important ability for many in the areas of engineering, science, and business.

Personal development from AL

Education is not just about measurable learning outcomes. It has personal, emotional, cultural, and intellectual effects too. Students were asked if active learning had been useful for their personal development. Table 8 also demonstrates overall positive personal experiences stemming from AL. The greatest recorded benefits were for 'improved planning skills', though it is interesting that the combined score for 'improved analytic skills' was only 60.6 percent.

Table 8: Personal development outcomes

The items	Very Useful	Useful	No difference	Not Useful	Not very useful	Total
Has been useful in understanding your responsibility for your own learning	71 (43.0)	35 (21.2)	23 (13.9)	17 (10.3)	19 (11.5)	165 (100.0)
Has improved your comprehension of the subject	67 (40.6)	38 (23.0)	33 (20.0)	16 (9.7)	11 (6.7)	165 (100.0)
Improved your planning skills	68 (41.2)	43 (26.1)	21 (12.7)	26 (15.8)	7 (4.2)	165 (100.0)
Improved your analytic skills	60 (36.4)	40 (24.2)	27 (16.4)	29 (17.6)	9 (5.5)	165 (100.0)

As noted above, analysis is an essential key skill for learning and for problem-solving at tertiary level, so it is a concern that the effects of AL were not higher. Related to this point, almost one-quarter (23.1 percent) provided a combined negative score for the analytic skills, stating that they had not derived any benefit from AL. Similarly, the score for 'responsibility for own learning' was supported by only 64.4 percent, and while this is an endorsement of the personal benefits of AL nevertheless it is surprising that the personal outcomes were not more strongly reported.

The interviews

Interviews were conducted with four teachers who had conducted classes using AL techniques. Three of the interviewees had been teaching for two years using active learning. One had been using it for a year. Of the four participants, three had used traditional methods in the past. Two said that they preferred to use active learning approaches, whereas the other two said that they used both active and traditional lecturing approaches. Interviewees were asked the following questions:

Question 1. Do you think that the students have benefitted from AL?

All responded that active learning had achieved positive results for students, with students benefiting in several ways. The following comment by interviewee #1 was typical of the replies:

'The attitude of most of the students has changed drastically from being afraid of the course to being happy with it'. 'I have found that there has been an improvement in students' English language, communication skills, presentations and responsibility for their own learning. Students now work as team members, think things through and have developed their problem-solving techniques, which they will use throughout life'.

Question 2. Is the classroom setting appropriate for AL?

The overall opinion was that not all of the classrooms were suitable for the active learning techniques. Some said that several classes were too large and others commented that the some of the classroom facilities were unsuitable.

Question 3. What resources would you like?

All said that there were sufficient resources at the university, but enlarged space for student activities and projects would be beneficial.

Question 4. What obstacles are encountered by staff using AL methods?

The replies were mixed, though overall the respondents considered that all obstacles could be addressed. In reply, interviewee #2 commented: 'I would like to say that in the final analysis, the AL system has satisfied most of its objectives, which is important to the accreditation process in many programs, especially engineering'.

Question 5. Have you had any training on AL?

All of the interviewees had received four weeks in-house training on delivering active learning.

In addition to the four teachers, two students were interviewed. The results of these interviews confirmed what was found in the questionnaire survey. Both were positive in their assessment of active learning, commenting that AL techniques had improved their abilities. For example, student #1 commented: 'We enjoyed learning by using active methods. We acquired a lot of good skills, which we feel are very important in all aspects of our lives. Our English language has improved and the course has strengthened the social relations between us through teamwork. We have developed to be creative in solving problems.'

Focus Group

The three participants were asked about the effectiveness of AL methods, the skills which the students may have acquired, their experiences (both positive and negative) of AL techniques, the obstacles to the use of AL, and how AL techniques could be improved?

All participants were strongly of the view that students benefitted, and they observed that students' levels of confidence improved, and that both practical and academic skills were strengthened. Students gained the experience of working in teams and groups, which would benefit them in the workaday world. They also improved their ability to understand the course material, took more responsibility for their own learning, were able to

analyse problems more effectively and could find solutions to problems more successfully.

Negative experiences focused on the problem of classes being too large and the time required by teachers to prepare AL methods. It was also felt that a student evaluation of the active learning program would be beneficial.

DISCUSSION

The first research question posed for this investigation was, 'Which AL strategies do students at a university in Saudi Arabia find most useful?' In response, the central finding of this enquiry was that the majority of students provided positive and supportive reports about AL methods, most commenting that the methods enhanced their learning to some extent. The AL methods which received strongest endorsement were the use of informal classroom settings, the opportunity to work collaboratively in groups, and the use of group discussions for analysing problems and understanding topics. Several AL methods were accorded response rates of about 70 percent approval: interestingly, even though it required more work by the students the use of reflective journals was considered to be beneficial (72.8 percent approval) because it helped them to focus their thoughts on the current subjects. The use of informal classroom settings (83 percent approval) was strongly favoured, this arrangement reportedly facilitating discussion, and small-group activities (70.9 percent support) were said to be useful aids to learning, as were teacher-issued checklists and worksheets.

The second research question was, 'What are the perceptions of students with regard to how AL strategies affected their learning?' Considered overall, most students stated that AL methods positively affected their learning, the improvements extending widely and included comprehension, planning, skills in analysis and IT, and methods of communication. All of these benefits were said by the students to have aided their own understandings and yielded higher results. It was evident, too,

that AL produced personal and developmental advantages for the students, most reporting benefits to their confidence, their ability to speak publically,

and to their attitudes to personal responsibility for their own education.

An important finding was that the results were not overwhelmingly positive, a proportion of students (sometimes as many as 20 percent) stating that AL methods were not more useful than traditional teaching methods; a finding that accords with the comments of previous researchers (Eison, 2010). Moreover, despite the personal reports by students that AL was enhancing their learning, it was not possible from this enquiry to determine definitively or statistically whether AL methods improved their overall grades or their test/examination results, or that AL achieved outcomes which were measurably better than those which might have otherwise been achieved by traditional (or other) means.

It is pertinent to note, too, that AL methods did not entirely supplant traditional lectures, most of the teachers commenting that they continued to use teacher-centred talks as a way of complementing AL. It was not entirely clear why lectures continued in common use, though it appeared that they could be used when there had been insufficient time to prepare active techniques or when the teacher wanted to impart a large amount of information quickly. It was also evident that teachers were sometimes impeded by the lack of suitable facilities, such as large rooms that could accommodate group activities.

Another important finding was the importance of appropriate teacher training. While the participating teachers reported having undertaken some training in AL methods, the training period of just a few weeks seems to have been inadequate. It became clear that teachers needed more time to prepare courses and topics using AL methods and that they had to devise new approaches for assessing students who had undertaken group work or some other collaborative activity.

The findings of this study confirm the value of AL as a way of enhancing learning by tertiary students. It shows that there are many ways in which students can be assisted to more effectively learn subjects, develop analytical skills, and solve problems. It confirms, also, that teachers need to be provided with both suitable training and facilities if AL methods are to be applied in useful ways. The value of AL needs to be disseminated more widely

amongst universities, and the case in support of AL would be strengthened if quantitative studies could show convincingly that learning outcomes and student grades can be elevated by the use of AL.

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